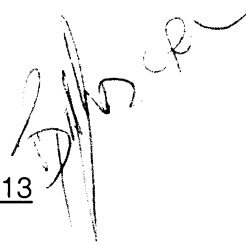


DATE: FEBRUARY 18, 2005  
TO: Municipal Clerk  
FROM: Byron E. Johnson, C.P.M.  
Director of Purchasing x 4313  
THRU: Rachel Johnson  
Clerk Typist II x 4162



Please place the following item on the **REGULAR** agenda for the Council Meeting of **MARCH 1, 2005.**

Item should read as follows:

Approve Change Order No. One to EAS Contracting, L. P. for Contract No. 2004-204, El Paso International Airport Airfield Lighting and Controls project for an increased amount of \$779,983.45, as follows:

Scope Change: Replace 203 signs of various types from 1 to 7 modules on the airfield. Add 60 calendar days to contract time. \$834,911.00

Construction Change: Revise line items in contract to allow for payment of temporary wiring, lights, and signs to reflect actual onsite conditions; revise contract line items for several duct bank configurations that are required between the handhole and the end of the casing for the bores under the taxiways and runway to reflect actual requirements; credit is also being provided for material not used in Taxiway K2 bore. <\$54,927.55>

Contact person: Barbara Crumley, Administrative Analyst, Purchasing (915) 541-4113

\*\*\*\*\*  
**AGENDA FOR: MARCH 1, 2005**  
\*\*\*\*\*

**CITY OF EL PASO, TEXAS  
REQUEST FOR COUNCIL ACTION (RCA)**

**DEPARTMENT:** Purchasing**AGENDA DATE:** February 21, 2005**CONTACT PERSON/PHONE:** Byron Johnson, Director of Purchasing (X4313)**DISTRICT(S) AFFECTED:** 3**PROJECT NAME/SOLICITATION NO.** EPIA Airfield Lighting and Controls, Contract No. 2005-014**SUBJECT:**

Approve Change Order No. One to EAS Contracting, L. P. for Contract No. 2004-204, El Paso International Airport Airfield Lighting and Controls project for an increased amount of \$779,983.45, as follows:

Scope Change: Replace 203 signs of various types from 1 to 7 modules on the airfield. Add 60 calendar days to contract time. \$834,911.00

Construction Change: Revise line items in contract to allow for payment of temporary wiring, lights, and signs to reflect actual onsite conditions; revise contract line items for several duct bank configurations that are required between the handhole and the end of the casing for the bores under the taxiways and runway to reflect actual requirements; credit is also being provided for material not used in Taxiway K2 bore. <\$54,927.55>

**BACKGROUND / DISCUSSION:**

Request for Change Order and backup are attached.

**PRIOR COUNCIL ACTION:**

N/A

**AMOUNT AND SOURCE OF FUNDING:**


Funding is provided by 62620031-G620AIP0021-11510-508027 (FAA Grant).

**BOARD / COMMISSION ACTION:**

N/A

\*\*\*\*\*REQUIRED AUTHORIZATION\*\*\*\*\*

**LEGAL:** (if required) \_\_\_\_\_**FINANCE:** (if required) \_\_\_\_\_**DEPARTMENT HEAD:** \_\_\_\_\_

(Example:  if RCA is initiated by Purchasing, client department should sign also)  
Information copy to appropriate Deputy City Manager

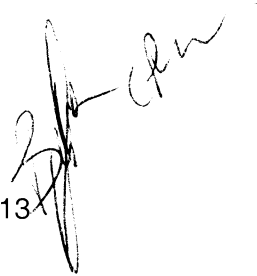
**APPROVED FOR AGENDA:** \_\_\_\_\_**CITY MANAGER:** \_\_\_\_\_**DATE:** \_\_\_\_\_

DATE: February 18, 2005

TO: Municipal Clerk

FROM: Byron E. Johnson, C.P.M.  
Director of Purchasing x 4313

THRU: Rachel Johnson  
Clerk Typist II x 4162



Please place the following item on the **REGULAR** agenda for the Council Meeting of March 1, 2005.

Item should read as follows:

Approve Change Order No. One to EAS Contracting, L. P. for Contract No. 2004-204, El Paso International Airport Airfield Lighting and Controls project for an increased amount of \$779,983.45, as follows:

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Construction Change: Revise line items in contract to allow for payment of temporary wiring, lights, and signs to reflect actual onsite conditions; revise contract line items for several duct bank configurations that are required between the handhole and the end of the casing for the bores under the taxiways and runway to reflect actual requirements; credit is also being provided for material not used in Taxiway K2 bore. <\$54,927.55>

Contact person: Barbara Crumley, Administrative Analyst, Purchasing (915) 541-4113.

\*\*\*\*\*  
AGENDA FOR: March 1, 2005  
\*\*\*\*\*

**CITY OF EL PASO PURCHASING DEPARTMENT  
CONTRACT CHANGE ORDER**

DATE: 2/17/2005

PROJECT: EPIA AIRFIELD LIGHTING AND CONTROLS

TO (Contractor): EAS CONTRACTING, LP

CHANGE ORDER NO.: 01

☒ SCOPE CHANGE ☒ CONSTRUCTION CHANGE

CONTRACT NO: 2004-204

DEPT. ID#: 62620031  
PROJ/GRANT/USER: G620AIP0021  
FUND: 11510  
ACCOUNT: 508027  
PO NO.: 2005002662

You are directed to make the following changes to this Contract:

1. Scope Change: Replace 203 signs of various types from 1 to 7 modules on the airfield. \$834,911.00 - Adds 60 calendar days.
2. Construction Change: Revise line items in contract to allow for payment of temporary wiring, lights, and signs to reflect actual onsite conditions; revise contract line items for several duct bank configurations that are required between the handhole and the end of the casing for the bores under the taxiways and runway to reflect actual requirements; credit is also being provided for material not used in Taxiway K2 bore. (\$54,927.55)

CHANGE ORDER AMOUNT : 779,983.45

Original Contract Sum	5,584,368.00
Net Change by previous Change Orders	0.00
Contract Sum prior to this Change Order	5,584,368.00
Contract Sum will be (increased)	By this Change Order 779,983.45
New Contract Sum, including this Change Order	6,364,351.45
Total Net Value of Change Orders To Date	779,983.45

Contract Time will be (increased) BY ( 60 ) DAYS\*

\* Subject to the terms of the Contract, GENERAL CONDITIONS, SECTION 2.5

Net Change Order Percentage (Not to exceed 25%) 13.97%

CONTRACTOR	PROGRAM MANAGER	CITY OF EL PASO
EAS CONTRACTING, LP	PARAGON PROJECT RESOURCES, INC.	
By: _____	Reviewed and Recommended: By: _____	CITY COUNCIL ACTION REQUIRED: [ ] No [ X ] Yes
Type or Print Name _____	Type or Print Name _____	Date Approved _____
Date _____	Date _____	
ARCHITECT / ENGINEER	COEP USER DEPARTMENT	
DINTER ENGINEERING COMPANY	AIRPORT	
By: _____	By: _____	By: _____
Type or Print Name _____	Type or Print Name _____	Rick Conner City Engineer
Date _____	Date _____	Date _____



## REQUEST FOR CHANGE ORDER No. 01

**TO:** Isela F. Canava

**DATE:** 02/2/2005

**FROM:** Manuel Rosas, Construction Manager  
Paragon Project Resources, Inc.  
4603 Ripley Drive  
El Paso, TX 79922-1015

(915) 252-4329

FAX (915) 771-0506

**RE:** **Project:** Airfield Lighting and Controls  
**Bid No:** 2004-204

**Change Order No:** 01 Replace Airport Signs, Temporary Measures for Circuits and Duct Banks from Bores to Handholes

**Please Indicate Type:** Construction ☒ Scope ☒  
**Please Indicate Action to PO:** Increase ☒ Decrease ☐ No Change ☐  
**Change in Contract Time:** 60 Days  
**Change Order Amount:** \$779,983.45

**Unforeseen Condition:** (\$54,927.55)

**Value Engineering:**

**Error/Omission:**

**User Request:** \$834,911.00

**Total** **\$779,983.45**

**Justification:** Item 1: Replace 203 signs of various types from 1 to 7 modules on the airfield. This increases contract amount by \$834,911.00 and increases the contract time frame by 60 calendar days. See Attached Item 1 Unit Price List.

Item 2: Revise line items in contract to allow for payment of temporary measures such as wiring, lights, and signs to reflect actual onsite conditions. Also, the contract line items for several duct bank configurations that are required between the handhole and the end of the casing for the bores under the taxiways and runway need to be revised to reflect actual requirements. Credit is also being provided for material not used in Taxiway K2 bore. This decreases contract amount by \$54,927.55 with no change in contract time. See Attached Item 2 Unit Price List.

**Attachments:** Item 1 Unit Price List  
Item 2 Unit Price List  
Problem / Solution Rationalization Item 1  
Problem / Solution Rationalization Item 2  
Letter: Engineer-of-Record  
Letter: EAS

**Approved by:**

**Patrick T. Abeln**  
**Director of Aviation**

**Date**

# Airfield Lighting and Controls Bid No. 2004-204

## Change Order # 01

### Item 1 Unit Prices

Line	Item	Qty		Unit Price	Total Price
56	L-858-6.8	30	New Size 3 One-module-single face, Guidance Sign.	\$3,200.00	<b>\$96,000.00</b>
57	L-858-6.9	2	New Size 3 One-module-double face, Guidance Sign.	\$3,250.00	<b>\$6,500.00</b>
58	L-858-6.10	23	New Size 3 Two-module-single face, Guidance Sign.	\$3,600.00	<b>\$82,800.00</b>
59	L-858-6.11	8	New Size 3 Two-module-double face, Guidance Sign.	\$3,700.00	<b>\$29,600.00</b>
60	L-858-6.12	47	New Size 3 Three-module-single face, Guidance Sign.	\$4,000.00	<b>\$188,000.00</b>
61	L-858-6.13	24	New Size 3 Three-module-double face, Guidance Sign.	\$4,150.00	<b>\$99,600.00</b>
62	L-858-6.14	12	New Size 3 Four-module-single face, Guidance Sign.	\$4,400.00	<b>\$52,800.00</b>
63	L-858-6.15	19	New Size 3 Four-module-double face, Guidance Sign.	\$4,600.00	<b>\$87,400.00</b>
64	L-858-6.16	1	New Size 3 Five-module-single face, Guidance Sign.	\$4,800.00	<b>\$4,800.00</b>
65	L-858-6.17	9	New Size 3 Five-module-double face, Guidance Sign.	\$5,000.00	<b>\$45,000.00</b>
66	L-858-6.18	1	New Size 3 Six-module-double face, Guidance Sign.	\$5,400.00	<b>\$5,400.00</b>
67	L-858-6.19	4	New Size 3 Seven-module-single face, Guidance Sign.	\$5,700.00	<b>\$22,800.00</b>

For the preceding items (Line 56 item L-858-6.8 thru Line 67 item L-858-6.19 ) the following applies: Furnishing a new L-858 sign, lamps and transformer mounting supports, hardware and reinstalling wiring of sign with new L-823 connectors, heat-shrinkable rubber sleeve over the connectors. Installed as completed unit, connected to circuit, operating for a minimum of one week burn-in period, ready for operation and accepted.

68	L-858-6.20	19	Type Four two sided Distance remaining signs on existing foundations.	\$4,600.00	<b>\$87,400.00</b>
69	L-858-6.21	4	Type Four two sided Distance remaining signs on new foundations and power.	\$6,600.00	<b>\$26,400.00</b>
70	L-858-6.22	67	Extend sign foundations for single module.	\$900.00	<b>\$60,300.00</b>
71	L-858-6.23	3	Extend sign foundations for double module.	\$1,400.00	<b>\$4,200.00</b>
72	L-858-6.24	1	Extend sign foundations for triple module.	\$1,600.00	<b>\$1,600.00</b>
<b>SUBTOTAL</b>					<b>\$900,600.00</b>

Eliminate the following Bid items where work is incorporated above

8	L-105-5.7	-6	Temporary Guidance Sign - Reflective (Allowance)	\$422.00	<b>(\$2,532.00)</b>
9	L-105-5.7	-6	Change Sign Panel - Size 3 (Allowance)	\$438.00	<b>(\$2,628.00)</b>
36	L-858-6.1	-200	Replace multi-step electronics with single -step	\$214.00	<b>(\$42,800.00)</b>
37	L-858-6.2	-5	New Guidance Sign Isolation Transformer	\$170.00	<b>(\$850.00)</b>
40	L-858-6.5	-3	New Size 3 Six-panel Guidance Sign Complete	\$4,962.00	<b>(\$14,886.00)</b>
41	L-858-6.6	-1	New Size 3 Two-panel Guidance Sign Panel	\$899.00	<b>(\$899.00)</b>
42	L-858-6.7	-1	Relocate Size 3, Two-panel Guidance Sign Panel	\$1,094.00	<b>(\$1,094.00)</b>
<b>SUBTOTAL</b>					<b>(\$65,689.00)</b>
<b>GRAND TOTAL</b>					<b>\$834,911.00</b>

**CHANGE ORDER REQUEST NO. 01**  
**Line Item 1**

**Project Name :** Airfield Lighting and Controls  
**Contractor :** EAS Contracting, LP  
**Bid No :** 2004-204

**DESCRIPTION OF CHANGE:** Remove and replace approximately 203 signs throughout the airfield. Nine are currently included in the contract to be replaced. Provide unit price to pay for the work to be completed for the various types of signs to be installed. These as shown on the list attached to the change order and range from single module signs with a single face to 6 & 7 module signs with two faces. Increase in contract value of \$834,911.00 and 60 calendar days.

**PROBLEM:** The current signs are old and in some cases do not comply with the FAA requirements such as having character closer than desired and panels that are custom made rather than standard sizes. Many panels on the signs are delaminating and out dated.

**SOLUTION:** Contractor currently onsite is experienced in this type of work and is required to make modifications to the existing signs electronic as well as install nine new signs. The new signs to be installed are also better than the current signs because their illumination source is from the bottom rather than the top and provides for more uniform illumination for the panel. In the past, the older signs had shadow lines in certain areas. Incorporating this work into its schedule should allow the completion to occur more timely. Lead time on the signs is up to twelve weeks and should provide for more efficient pricing since contractor is mobilized.

**COST:** \$ 834,911.00

**CHANGE ORDER TYPE:** User Request



**White, Tracy**

---

To...

Cc...

Bcc...

**Subject:** FW: EPIA - ALC Signage Proposal

**Attachments:**

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**From:** Eric.Lovejoy@kimley-horn.com [mailto:Eric.Lovejoy@kimley-horn.com]

**Sent:** Mon 1/24/2005 2:18 PM

**To:** White, Tracy

**Subject:** RE: EPIA - ALC Signage Proposal

Tracy,

A simple average cost calculation yields \$4,287.56/sign. This is quite within reason based on bids (not change orders) on several of our projects within the last couple of years.

I find it acceptable.

By way of history; during my conversation with Monica Lombrana when we first discussed adding the signs I had estimated the change to be \$1 mil.

Thanks,  
eric

January 31, 2005

EAS CONTRACTING, L. P.  
2535 Walnut Hill Lane  
Dallas, Texas 75229

Engineering Department  
City of El Paso  
2 Civic Center Plaza  
El Paso, TX 79901

Re: EPIA Airfield Lighting and Controls, Bid No. 2004-204  
Revised Signage Proposal 1-31-05

After additional review and on-site examination, EAS CONTRACTING, L.P. is pleased to offer the following Signage Proposal in a Unit Price Format inclusive of known modifications:

223 Lighted Signs provided by Siemens Airfield Solutions.

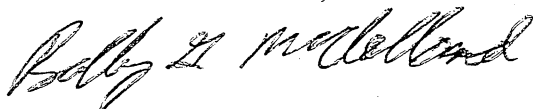
**\$899,000.00 Proposed Cost For Added Signage**

**\$ (65,491.00) Credit From Existing Contract Items L-858-6.1, 6.2, 6.5, 6.6, and 6.7**

**\$833,509.00 Additional Cost to Contract**

Estimate is based on Drawing Dated 5/20/2003 and photo field survey of existing.  
Completion will require an additional 60 calendar days added to Contract.  
Estimate includes discussed power to (4) Distance Remaining Signs.  
**Revised Project Schedule will Target Completion of Runway 4-22 as a Priority.**  
Materials Provided by DBE Create 50% DBE.

Sincerely,  
EAS CONTRACTING, L.P.



Bobby G. McClelland  
Project Manager

El PASO Revised Signage Take-off 1-26-2005

208 Total Sign Locations		+ 15	223 Total Signs	
1	1 Module Single Face	30	\$3200.00	\$ 96000.00
2	1 Module Double Face	2	\$3250.00	\$ 6500.00
	2 Module Single Face ( In Contract)	4	-----	-----
3	2 Module Single Face	23	\$3600.00	\$ 82800.00
7	2 Module Double Face	8	\$3700.00	\$ 29600.00
	3 Module Single Face ( In Contract)	1	-----	-----
5	3 Module Single Face	47	\$4000.00	\$188000.00
6	3 Module Double Face	24	\$4150.00	\$ 99600.00
7	4 Module Single Face	12	\$4400.00	\$ 52800.00
8	4 Module Double Face	19	\$4600.00	\$ 87400.00
9	5 Module Single Face	1 (2+3)	\$4800.00	\$ 4800.00
10	5 Module Double Face	9 (2+3)	\$5000.00	\$ 45000.00
	6 Module Single Face	0	4962	
11	6 Module Double Face	1 (3+3)	\$5400.00	\$ 5400.00
12	7 Module Single Face	4 (4+3)	\$5700.00	\$ 22800.00
13	Distance Remaining Signs Double Face (Foundations not modified)	19	\$4600.00	\$ 87400.00
14	Distance Remaining Signs Double Face (With Foundations and power source)	4	\$6600.00	\$ 26400.00
	Extend Sign Foundations	70 of 208		
15	(67) Single Extension)		\$ 900.00	\$ 60300.00
16	( 3) Double Extension)		\$1400.00	\$ 4200.00

**TOTAL PROPOSAL**

**\$899000.00**

208  
5  
213

Memo to File

## Record of Events

The Contractor first submitted a proposal on December 15, 2004 based on a rough count of signs in the amount of \$840,658.65 and requested 90 calendar days extension. This proposal included credit for nine signs currently in the contract and a count of 226 signs.

Since that date, we have done a lot of further investigation and determined the sign count is approximately 203 not 227 plus the nine signs in the contract. In addition, we determined the number of sign bases to extend is approximately 70 not 65 originally estimated.

Based on these changes and the additional information collected, the contractor provided a revised price of \$833,509.00 and 60 calendar day extension. This amount includes credit for work not required as a result of this change and eliminates an existing unit price for six module sign which is believed to require a seven module sign. A recap of the amounts is as follows:

Cost of new work	\$899,000.00
Credit for deleted work	(\$65,491.00)
Costs of change	\$833,509.00

The line Items included in the credit are as follows:

Item	Qty		U/P	Total	
36	200	L-858-6.1	\$214.00	\$42,800.00	Sign Electronics
37	5	L-858-6.2	\$170.00	\$850.00	Sign Transformers
40	4	L-858-6.5	\$4,962.00	\$19,848.00	Size 3, Six Module
41	1	L-858-6.6	\$899.00	\$899.00	Sign Panel, Two Panel
42	1	L-858-6.7	\$1,094.00	\$1,094.00	Relocate, Two Module Panels
				\$65,491.00	

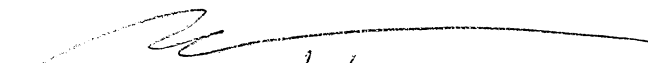
This assessment is OK except that I revised the quantity of Item 40 from 4 to 3 because the item may be required depending on the 4 large signs configuration, i.e. 6 or 7 module. This results in a reduction of the credit of \$4,962.00. Also, I added a Unit Price for Extend Foundation 3 Module in case it is needed at \$1,600.00.

In addition, we have identified other related items that can also be eliminated as listed below:

Item	Qty		U/P	Total	
8	6	L-105-5.7	\$422.00	\$2,532.00	Temp. Sign Reflective
9	6	L-105-5.8	\$438.00	\$2,628.00	Change Sign Panel
				\$5,160.00	

The result is an adjustment to the credit of \$198.00 (\$5,160 - \$4,962), or \$65,689 and resulting in the following:

Cost of new work	\$899,000.00
Credit for deleted work	(\$65,689.00)
New Pay Item	\$1,600.00
Costs of change	\$834,911.00

  
2/1/05

	No.	Type	Legend/Front				Legend/Back			
✓	1	L,R (FRONT) L,Y (BACK)	A	4 —	A P C H		A			
✓	2	Y (FRONT) Y,L,Y (BACK)	4 ↑				← A	B	A →	
✓	3	R,L (FRONT) Y,L (BACK)	4 —	A P C H	A					A
✓	5	L,R (FRONT) L,Y (BACK)	D	4 —	2 2		D			
✓	6	Y (FRONT)	D →							
4	7	L,R (FRONT) L,Y (BACK)	F	8 R	—	A P C H	F			
✓	8	Y (FRONT)	↖ J							
2	9	Y,L,Y (FRONT)	← F	E	F →					
4	10	L,R (FRONT L,Y (BACK)	J	8 R	—	A P C H	J			
4	11	L,R (FRONT L,Y (BACK)	F	8 R	—	A P C H	F			
✓	12	L,R (FRONT L,Y (BACK)	F	4 —	2 2		F			
✓	13	L,R (FRONT L,Y (BACK)	G	4 —	2 2		G			
✓	14	L,R (FRONT L,Y (BACK)	E	2 2	— 4		E			
✓	15	Y, (FRONT)	← G	↖ F						
4	16	L,R (FRONT L,Y (BACK)	G	8 R	—	A P C H	G			
4	17	R,L (FRONT) Y,L (BACK)	8 R	—	A P C H H					H
✓	18	Y,L,Y (FRONT)	↖ J	H	J ↗					
✓	19	L (FRONT)	J							
4	20	L,R (FRONT L,Y (BACK)	J	8 R	—	A P C H	J			
✓	21	L,Y (FRONT)	M	L →						
3	22	L,R (FRONT L,Y (BACK)	K	2 6	L — 8 R		K			
3	23	R,L (FRONT) Y,L (BACK)	8 R	— 2	6 L K					K
✓	24	Y,Y,L (FRONT) L (BACK)	← M	↖ L	G		G			
4	25	Y,Y,Y,L,Y,Y (FRONT) L (BACK)	↑ 4	↑	8 R G 2 2 ↗					G
✓	26	Y,L,Y,Y (FRONT)	← M	L	G ↑ M →					
3	27	Y (FRONT) Y (BACK)	8 L	. 2	6 L ↑		↖ F	B O		
✓	28	Y,L (FRONT)	← L	M						
3	29	L,R (FRONT L,Y (BACK)	M	8 R	— 2 6 L		M			
✓	30	Y (FRONT)	E ↗							
✓	31	Y (FRONT)	M →							
✓	32	Y (FRONT)	← M							
3	33	L,R (FRONT L,Y (BACK)	M	2 6	L — 8 R		M			



✓	34	Y,L,Y,Y (FRONT)	← K	M	M ↑	K →					
✓	35	Y,L,Y (FRONT)	↖ M	K	M →						
✓	36	Y,L,Y (FRONT)	← J	M	J →						
✓	37	Y,L,Y (FRONT)	← K	M	K →						
✓	38	Y,L,Y (FRONT)	← M	K	M →						
✓	39	Y,L,Y (FRONT)	← M	J	M →						
✓	40	Y,L,Y (FRONT)	← J	M	J →						
✓	41	L,R (FRONT L,Y (BACK)	H	4 —	2 2			H	≡≡	≡≡	
✓	43	Y (FRONT) Y (BACK)	↖ H					M →			
✓	44	L,R (FRONT) L,Y (BACK)	M	4 —	2 2			M	≡≡	≡≡	
✓	45	Y (FRONT)	← M								
✓	46	Y,L (FRONT)	← N	K							
✓	47	Y,L,Y (FRONT)	← K	N	K →						
2	48	Y,L,Y (FRONT)	← N	J	N →						
2	49	Y,L,Y (FRONT)	← J	N	J →						
2	50	L,R (FRONT) L,Y (BACK)	N	4 —	2 2			N	≡≡	≡≡	
✓	51	Y (FRONT)	N →								
✓	52	Y (FRONT) Y (BACK)	P ↗					← N			
✓	53	L,R (FRONT L,Y (BACK)	A	4 —	A P	C H		A	≡≡	≡≡	≡≡
2	54	L,R (FRONT) L,Y (BACK)	P	4 —	2 2			P	≡≡	≡≡	
2	55	Y,L,Y (FRONT)	↖ J	P	J ↘						
✓	56	Y,L (FRONT)	← Q	K							
✓	57	Y,L,Y (FRONT)	← K	Q	K →						
2	58	Y,L,Y (FRONT)	← Q	J	Q →						
2	59	Y,L,Y (FRONT)	← J	Q	J →						
2	60	L,R (FRONT) L,Y (BACK)	Q	4 —	2 2			Q	≡≡	≡≡	
✓	61	Y (FRONT)	Q →								
✓	62	Y (FRONT)	← Q								

2	67	L,R (FRONT) L,Y (BACK)	R	4	—	2	2		R	
✓	68	Y (FRONT)	R →							
✓	69	Y (FRONT)	← R							
✓	70	Y (FRONT)	J ↗							
✓	71	L,R (FRONT) L,Y (BACK)	J	2	2				J	
✓	73	Y,L (FRONT)	← S	L						
2	74	Y,L,Y (FRONT)	← L	S	L →					
3	75	L,R (FRONT) L,Y (BACK)	S	8	R	—	2	6	L	S
✓	76	Y (FRONT)	S →							
✓	77	Y (FRONT)	← S							
✓	78	Y,L (FRONT)	← T	L						
2	79	Y,L,Y (FRONT)	← L	T	L →					
3	80	L,R (FRONT) L,Y (BACK)	T	8	R	—	2	6	L	T
✓	81	Y (FRONT)	T →							
✓	82	Y (FRONT)	← T							
✓	83	Y (FRONT)	F B	O	↑					
✓	84	L, (FRONT)	U							
2	85	Y,L,Y (FRONT)	← U	L	U →					
✓	86	Y,L,Y (FRONT)	↖ U	V	U →					
✓	87	Y,L,Y (FRONT)	↖ U	U	V ↗					
2	88	Y,L,Y (FRONT)	← L	U	L →					
✓	90	L,Y (FRONT)	L	T →						
2	91	Y,L,Y (FRONT)	← U	L	U →					
✓	92	L,Y (FRONT)	L	S →						
3	93	L,R (FRONT) L,Y (BACK)	U	8	R	—	2	6	L	U
✓	94	Y (FRONT)	U →							
✓	95	Y (FRONT)	← U							
3	96	Y (FRONT)	8	L	—	2	6	R	↑	
3	97	L,R (FRONT) L,Y (BACK)	U	2	6	L	—	8	R	U
3	98	L,R (FRONT) L,Y (BACK)	U	8	L	—	2	6	R	U
3	99	L,R (FRONT) L,Y (BACK)	V	8	L	—	2	6	R	V
✓	100	Y, (FRONT)	← V	U	↑					

3	101	L,R (FRONT) L,Y (BACK)	V	2 6	L —	8 R	V	
3	102	Y (FRONT)	8 L	— 2	6 R	↑		
✓	103	Y (FRONT)	V →					
✓	104	Y (FRONT)	← V					
✓	105	Y,L,Y (FRONT)	↖ V	L	V →			
3	106	L,R (FRONT) L,Y (BACK)	V	8 R	— 2	6 L	V	
2	107	Y,L,Y (FRONT)	← Q	J	Q →			
✓	108	Y,L,Y (FRONT)	↖ V	V	L ↗			
✓	109	L,Y (FRONT)	K	Q →				
✓	110	Y (FRONT)	L ↗					
2	111	L,R (FRONT) L,Y (BACK)	L	2 6	L		L	
✓	112	R,L (FRONT) Y,L (BACK)	2 2	J			J	
2	113	R,L (FRONT) Y,L (BACK)	2 6	L		L		
2	114	Y,L,Y (FRONT)	← N	J	N →			
✓	115	L,Y (FRONT)	K	N →				
✓	116	Y,L,Y (FRONT)	← M	J	M →			
✓	117	B (FRONT & BACK)	8				1	
✓	118	B (FRONT & BACK)	7				2	
✓	119	B (FRONT & BACK)	6				3	
✓	120	B (FRONT & BACK)	5				4	
✓	121	B (FRONT & BACK)	4				5	
✓	122	B (FRONT & BACK)	3				6	
✓	123	B (FRONT & BACK)	2				7	
✓	124	B (FRONT & BACK)	1				8	
✓	125	L,Y (FRONT)	G	M ↗				
✓	126	Y,L,Y (FRONT)	↖ V	U	U ↗			
✓	127	B (FRONT & BACK)	10				2	
✓	128	B (FRONT & BACK)	9				3	
✓	129	B (FRONT & BACK)	8				4	
✓	130	B (FRONT & BACK)	7				5	
✓	131	B (FRONT & BACK)	6				6	
✓	132	B (FRONT & BACK)	5				7	
✓	133	B (FRONT & BACK)	4				8	
✓	134	B (FRONT & BACK)	3				9	

[illegible]

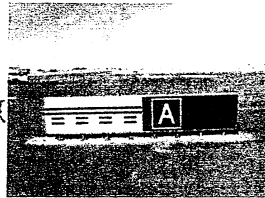
2	167	Y (FRONT)	← U	→					
4	168	R,L (FRONT) Y,L (BACK)	8 R	—	A P	C H	G		
✓	169	Y (FRONT)	2 6	L →					
✓	170	Y,L,Y (FRONT) Y (BACK)	← K	K 1	K →				
✓	171	Y,L,Y (FRONT) Y (BACK)	← J	K 1	J →				
✓	172	Y,L,Y (FRONT) Y (BACK)	← K	K 1	K →				
✓	173	Y (FRONT)	C A	R G	O →				
✓	174	Y (FRONT) Y (BACK)	← C	A R	G O				
3	175	L,Y (FRONT)	K	←	K 1	→			
✓	176	Y,L,Y (FRONT)	← R	K	R →				
✓	177	Y,L,Y (FRONT)	← R	J	R →				
✓	178	Y (FRONT)	C A	R G	O →				
✓	179	Y (FRONT) Y,L,Y (BACK)	C A	R G	O ↑				
4	180	Y,L,Y (FRONT)	← J	R	J →				
✓	181	Y,L,Y (FRONT)	← R	K	R →				
✓	182	Y (FRONT)	C A	R G	O →				
✓	183	Y,L,Y (FRONT)	← K	R	K →				
✓	184	Y,L,Y (FRONT)	← R	J	R →				
4	185	Y,L,Y (FRONT)	← J	R	J →				
3	186	L,Y (FRONT)	J	←	K 1	→			
✓	187	B (FRONT & BACK)	11						
✓	188	Y (FRONT)	↙	K 1					
✓	189	Y (FRONT)	K 1	↗					
✓	190	R,L (FRONT) L,Y (BACK)	4 —	22	K 1				
3	191	Y,L,Y,Y (FRONT)	← J	J	K 2	→			
3	192	L,Y (FRONT), Y (BACK)	J	←	K 1	→			
✓	193	R,L (FRONT) Y,L (BACK)	4 —	2 2	K 1				
✓	194	Y,L,Y (FRONT) Y (BACK)	← J	K 2	J ↑				
3	195	L,Y (FRONT)	K	←	K 1	→			
3	196	L,Y (FRONT)	K	←	K 2	→			
✓	197	Y,L (FRONT)	← K	K 2					
✓	198	Y (FRONT)	C A	R G	O →				
✓	199	L,Y (FRONT)	K 2	K →					

[illegible]

# AIRPORT SIGNS



001A.JPG



001B.JPG



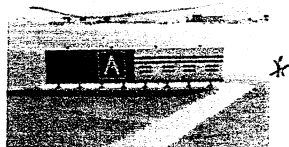
002A.JPG



002B.JPG



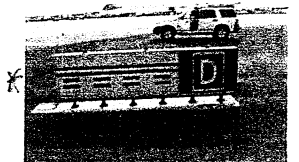
003A.JPG



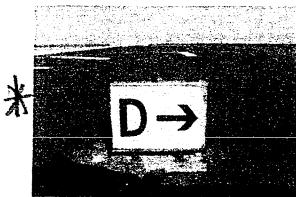
003B.JPG



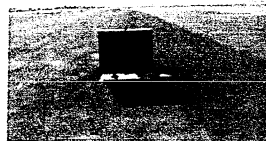
005A.JPG



005B.JPG



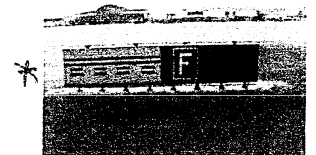
006A.JPG



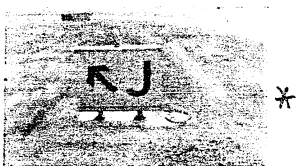
006B.JPG



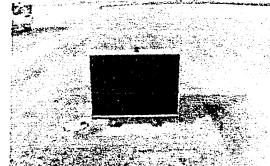
007A.JPG



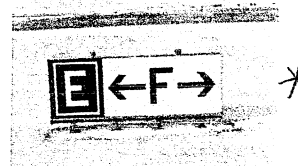
007B.JPG



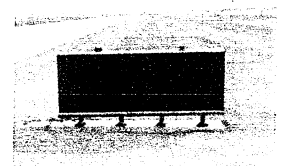
008A.JPG



008B.JPG



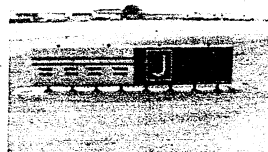
009A.JPG



009B.JPG



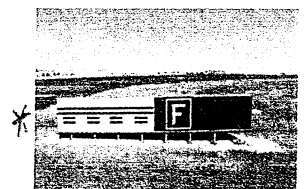
010A.JPG



010B.JPG

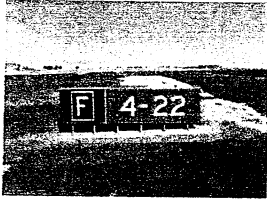


011A.JPG

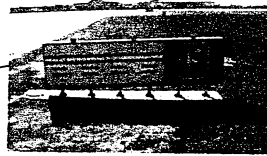


011B.JPG

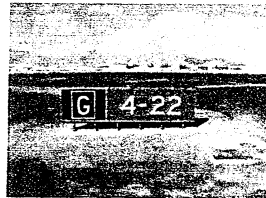
# AIRPORT SIGNS



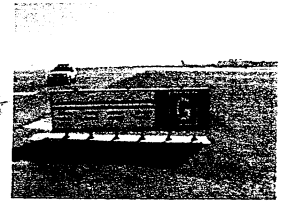
012A.JPG



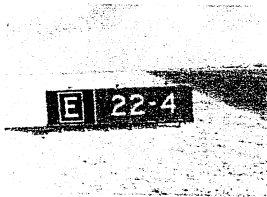
012B.JPG



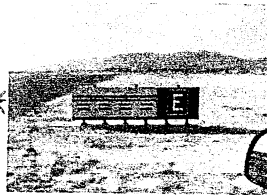
013A.JPG



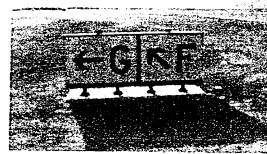
013B.JPG



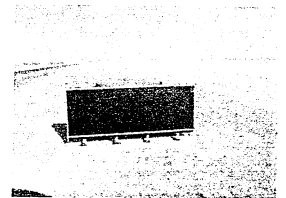
014A.JPG



014B.JPG



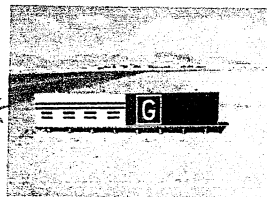
015A.JPG



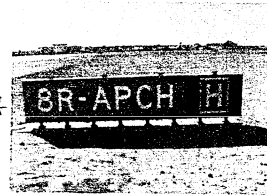
015B.JPG



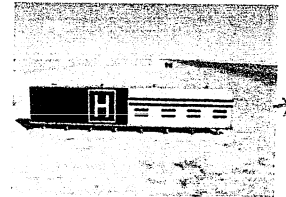
016A.JPG



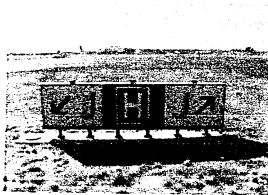
016B.JPG



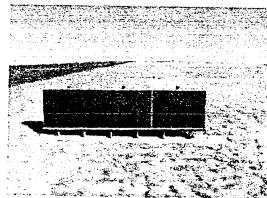
017A.JPG



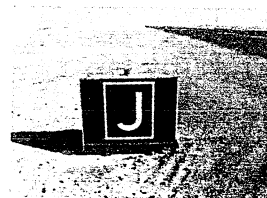
017B.JPG



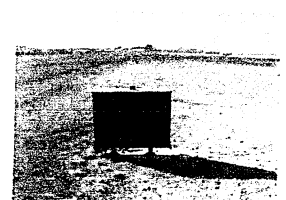
018A.JPG



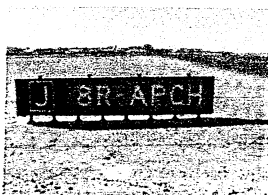
018B.JPG



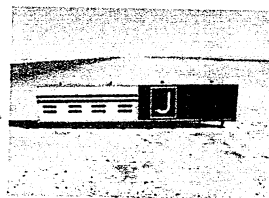
019A.JPG



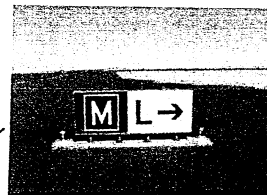
019B.JPG



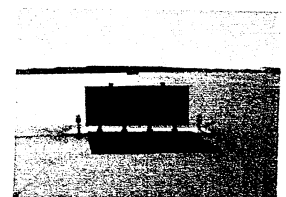
020A.JPG



020B.JPG



021A.JPG



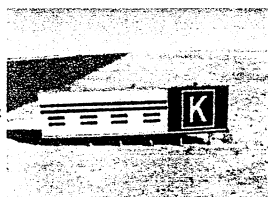
021B.JPG



# AIRPORT SIGNS



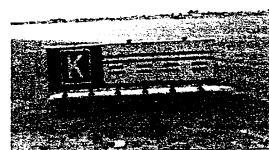
022A.JPG



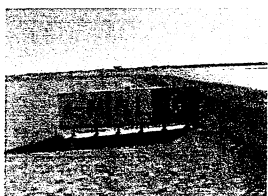
022B.JPG



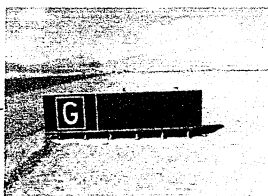
023A.JPG



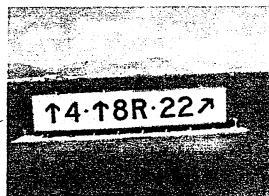
023B.JPG



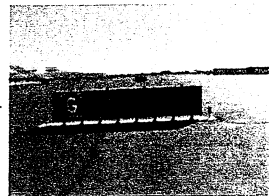
024A.JPG



024B.JPG



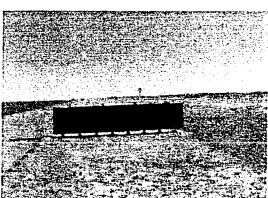
025A.JPG



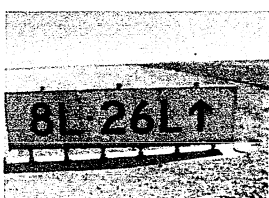
025B.JPG



026A.JPG



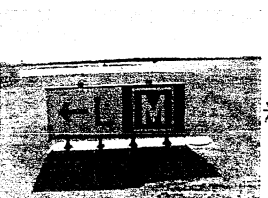
026B.JPG



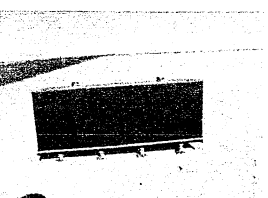
027A.JPG



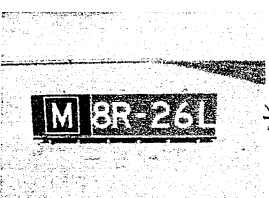
027B.JPG



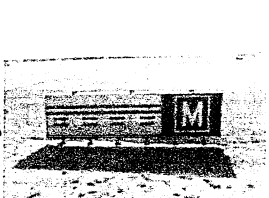
028A.JPG



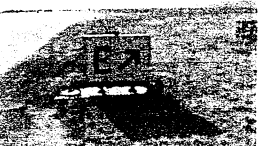
028B.JPG



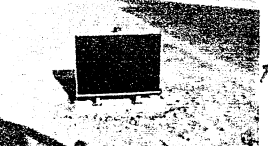
029A.JPG



029B.JPG



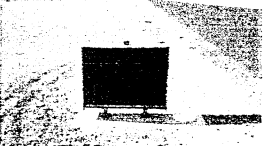
030A.JPG



030B.JPG

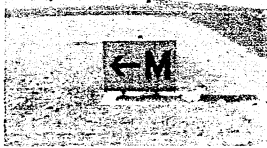


031A.JPG

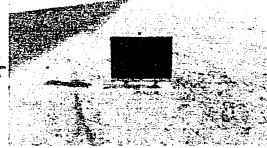


031B.JPG

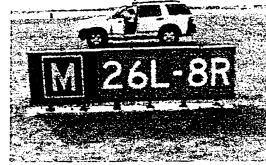
# AIRPORT SIGNS



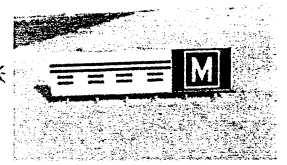
032A.JPG



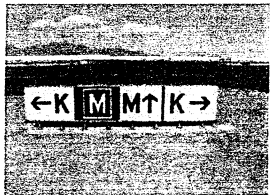
032B.JPG



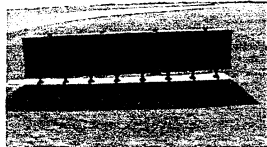
033A.JPG



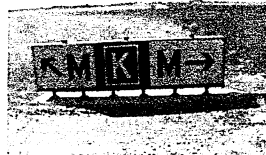
033B.JPG



034A.JPG



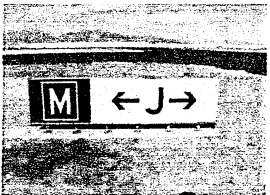
034B.JPG



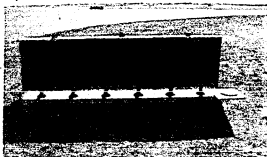
035A.JPG



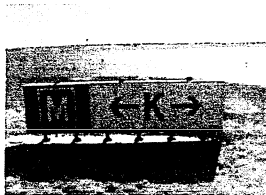
035B.JPG



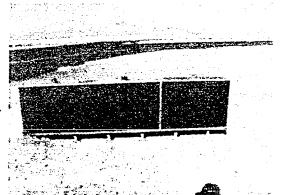
036A.JPG



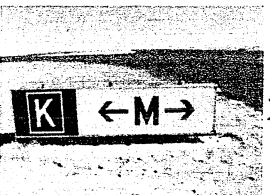
036B.JPG



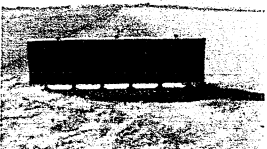
037A.JPG



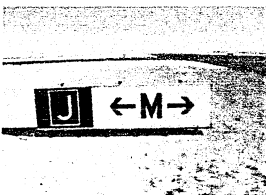
037B.JPG



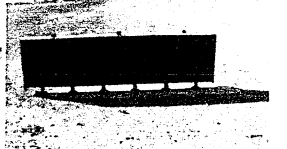
038A.JPG



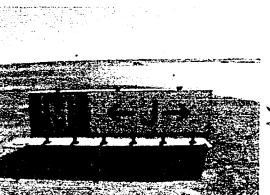
038B.JPG



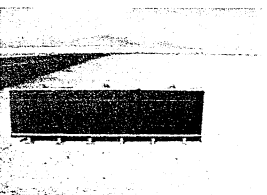
039A.JPG



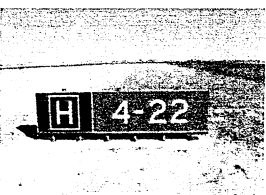
039B.JPG



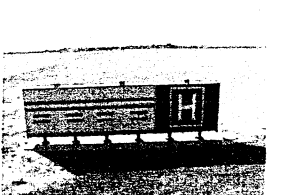
040A.JPG



040B.JPG

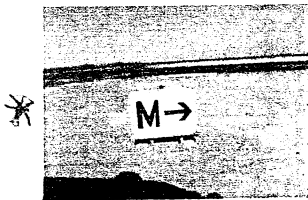


041A.JPG

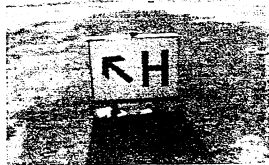


041B.JPG

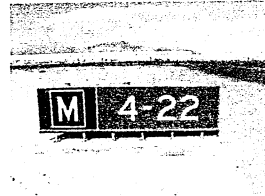
## AIRPORT SIGNS



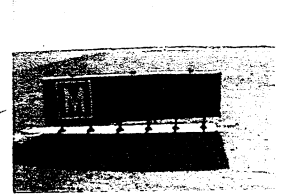
043A.JPG



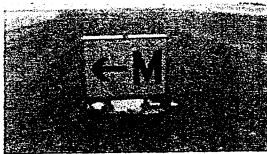
043B.JPG



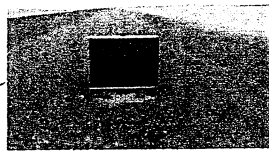
044A.JPG



044B.JPG



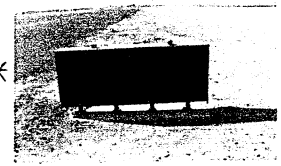
045A.JPG



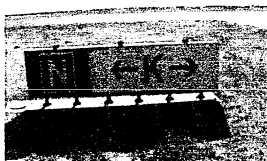
045B.JPG



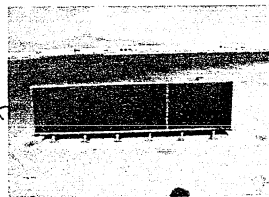
046A.JPG



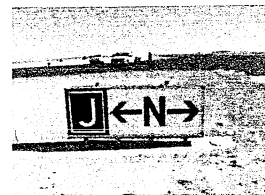
046B.JPG



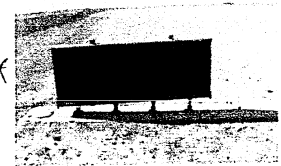
047A.JPG



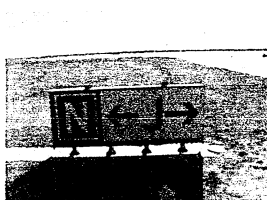
047B.JPG



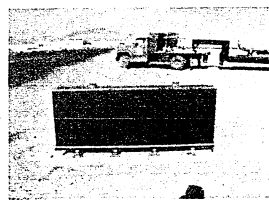
048A.JPG



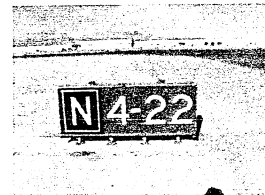
048B.JPG



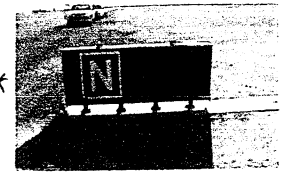
049A.JPG



049B.JPG



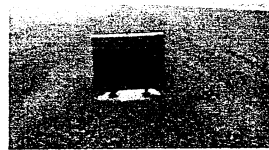
050A.JPG



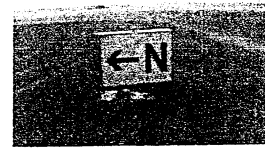
050B.JPG



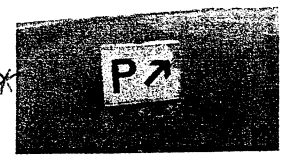
051A.JPG



051B.JPG

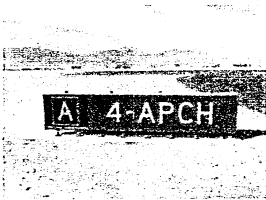


052A.JPG



052B.JPG

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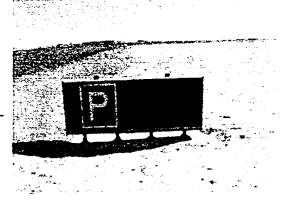
053A.JPG



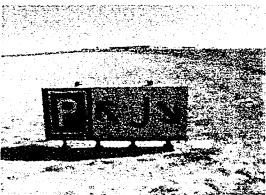
053B.JPG



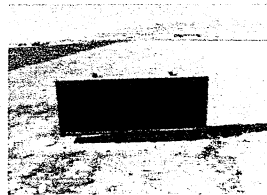
054A.JPG



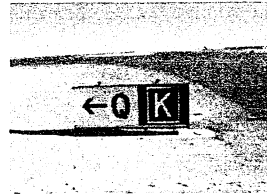
054B.JPG



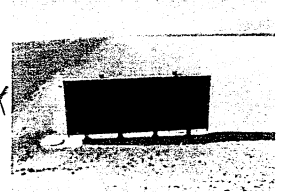
055A.JPG



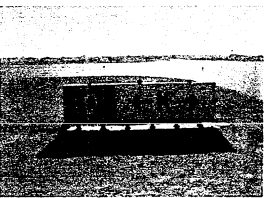
055B.JPG



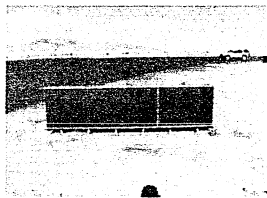
056A.JPG



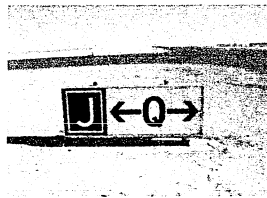
056B.JPG



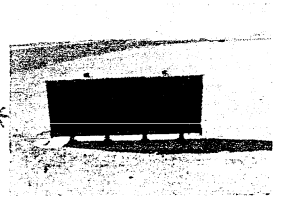
057A.JPG



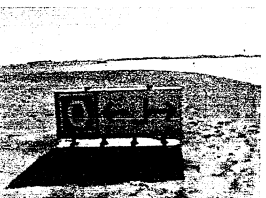
057B.JPG



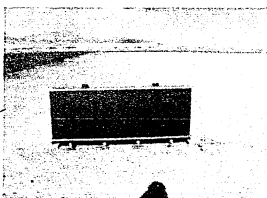
058A.JPG



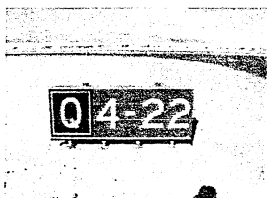
058B.JPG



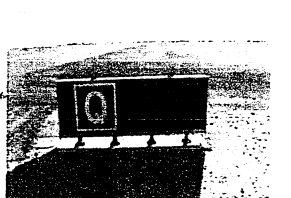
059A.JPG



059B.JPG



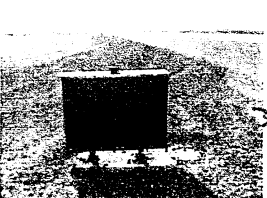
060A.JPG



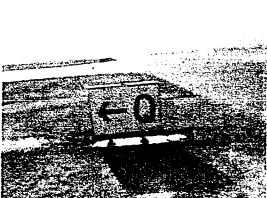
060B.JPG



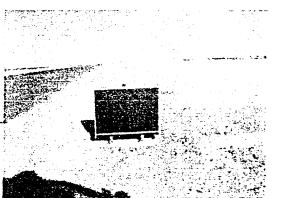
061A.JPG



061B.JPG

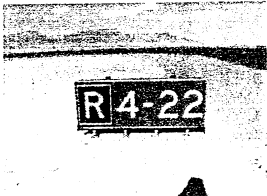


062A.JPG

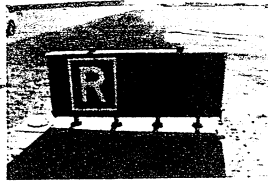


062B.JPG

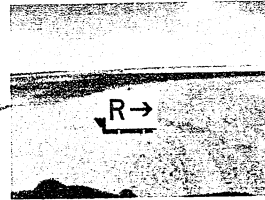
## AIRPORT SIGNS



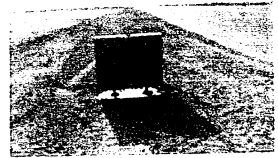
067A.JPG



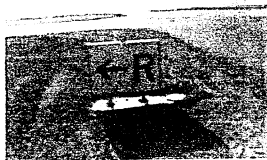
067B.JPG



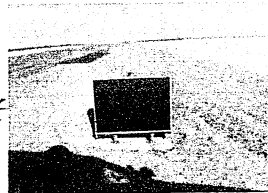
068A.JPG



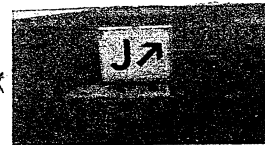
068B.JPG



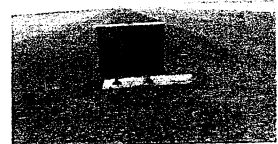
069A.JPG



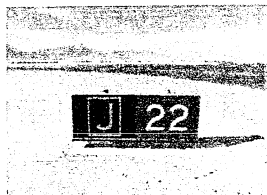
069B.JPG



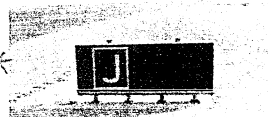
070A.JPG



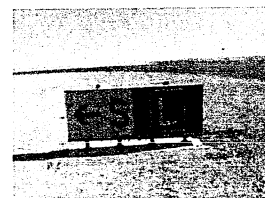
070B.JPG



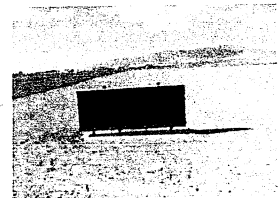
071A.JPG



071B.JPG



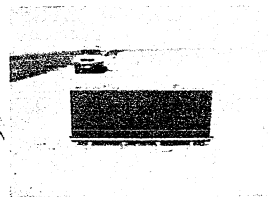
073A.JPG



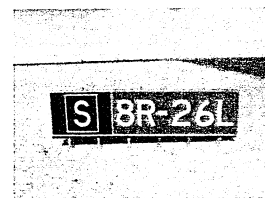
073B.JPG



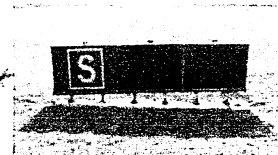
074A.JPG



074B.JPG



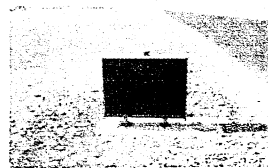
075A.JPG



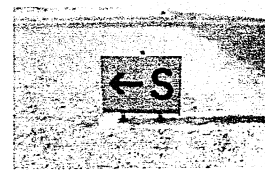
075B.JPG



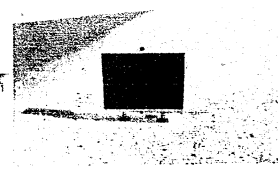
076A.JPG



076B.JPG

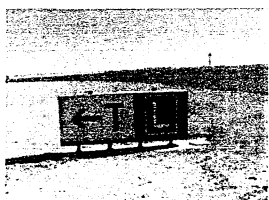


077A.JPG

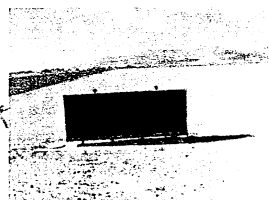


077B.JPG

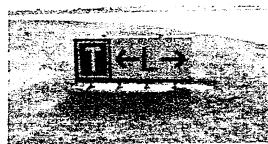
## AIRPORT SIGNS



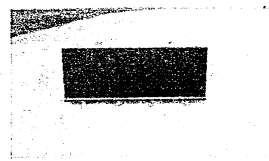
078A.JPG



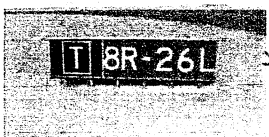
078B.JPG



079A.JPG



079B.JPG



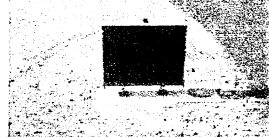
080A.JPG



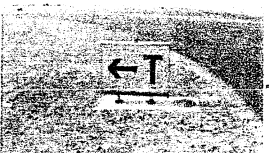
080B.JPG



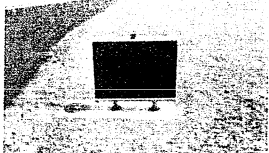
081A.JPG



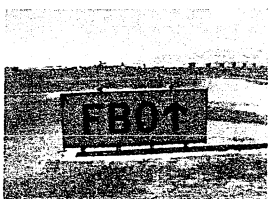
081B.JPG



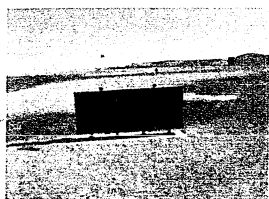
082A.JPG



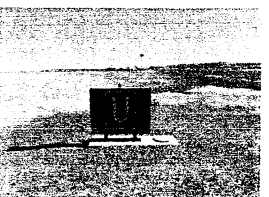
082B.JPG



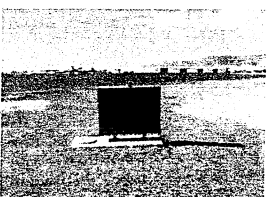
083A.JPG



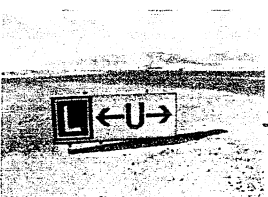
083B.JPG



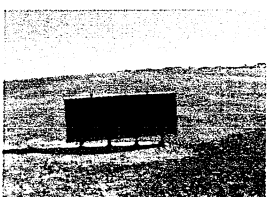
084A.JPG



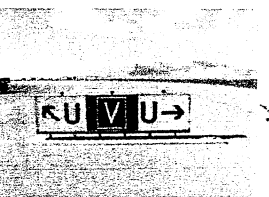
084B.JPG



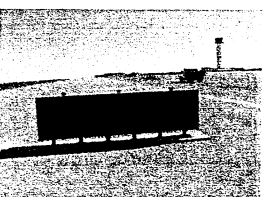
085A.JPG



085B.JPG



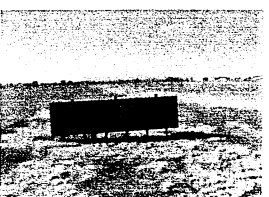
086A.JPG



086B.JPG

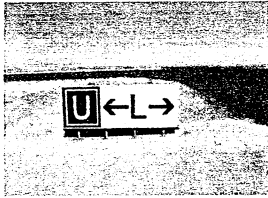


087A.JPG

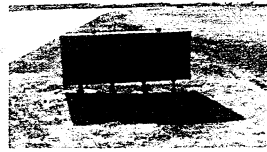


087B.JPG

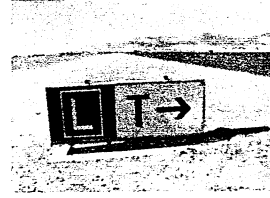
# AIRPORT SIGNS



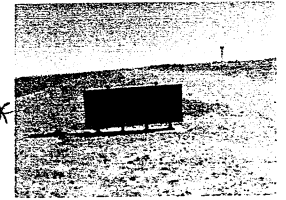
088A.JPG



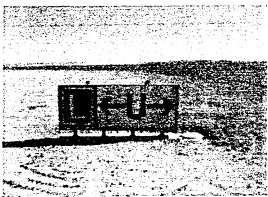
088B.JPG



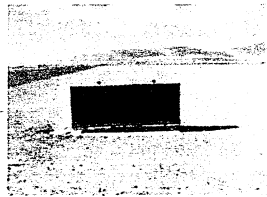
090A.JPG



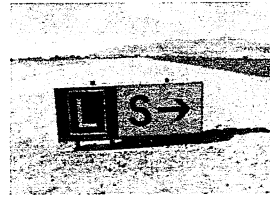
090B.JPG



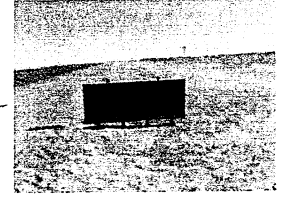
091A.JPG



091B.JPG



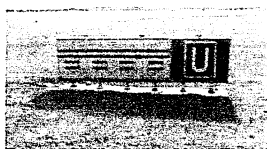
092A.JPG



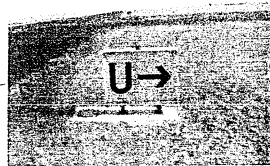
092B.JPG



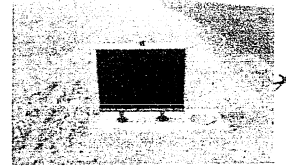
093A.JPG



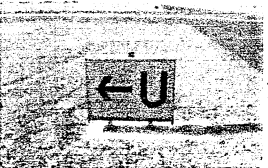
093B.JPG



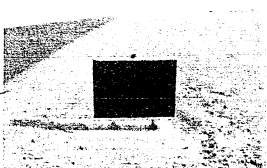
094A.JPG



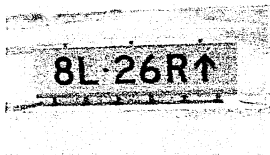
094B.JPG



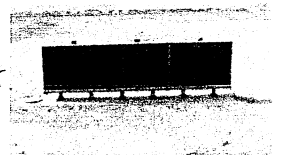
095A.JPG



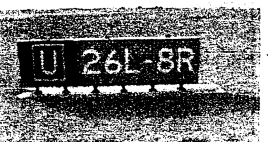
095B.JPG



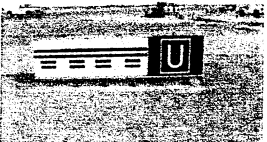
096A.JPG



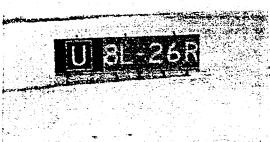
096B.JPG



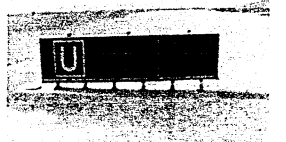
097A.JPG



097B.JPG



098A.JPG



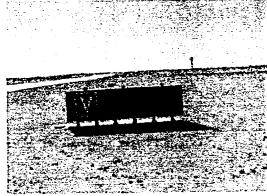
098B.JPG



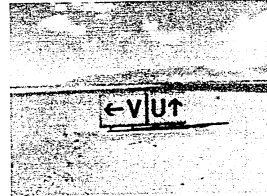
# AIRPORT SIGNS



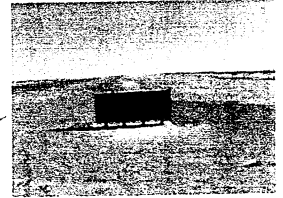
099A.JPG



099B.JPG



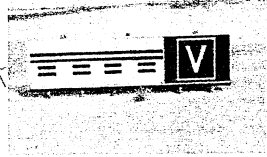
100A.JPG



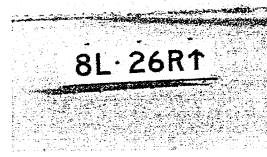
100B.JPG



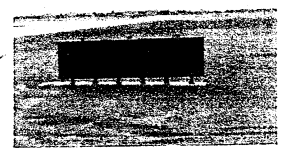
101A.JPG



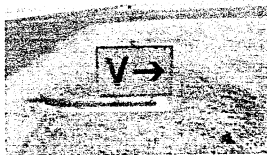
101B.JPG



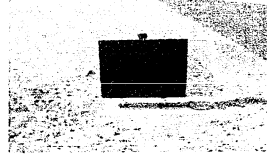
102A.JPG



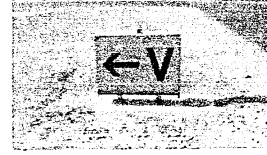
102B.JPG



103A.JPG



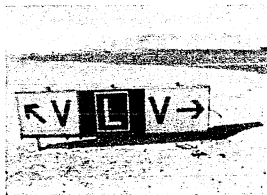
103B.JPG



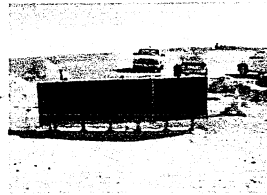
104A.JPG



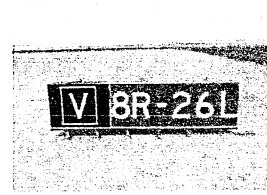
104B.JPG



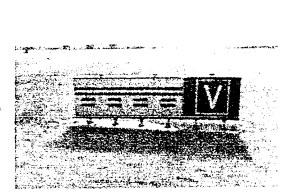
105A.JPG



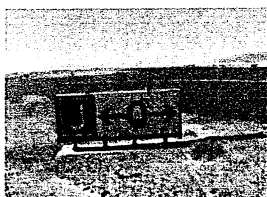
105B.JPG



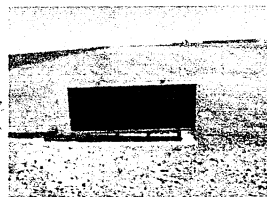
106A.JPG



106B.JPG



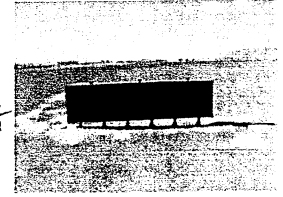
107A.JPG



107B.JPG



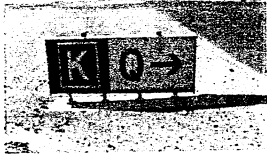
108A.JPG



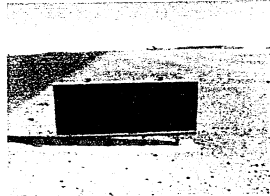
108B.JPG



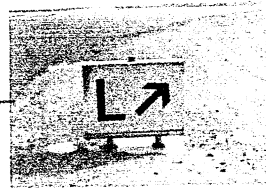
## AIRPORT SIGNS



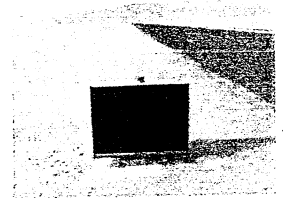
109A.JPG



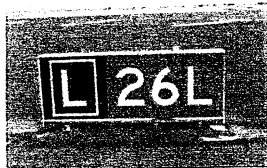
109B.JPG



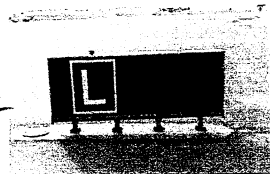
110A.JPG



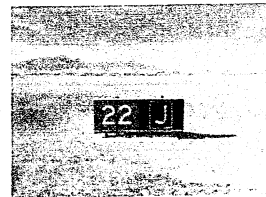
110B.JPG



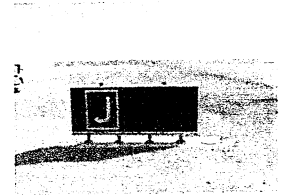
111A.JPG



111B.JPG



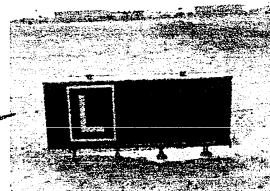
112A.JPG



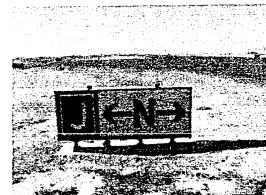
112B.JPG



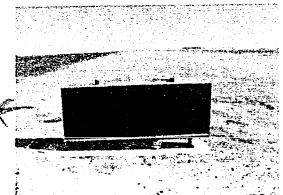
113A.JPG



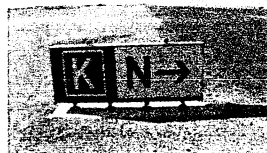
113B.JPG



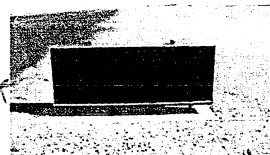
114A.JPG



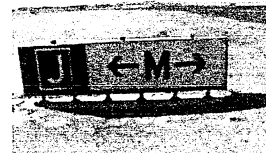
114B.JPG



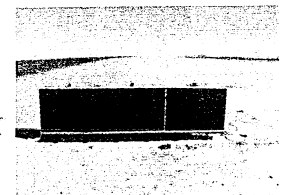
115A.JPG



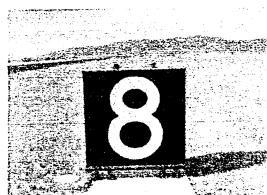
115B.JPG



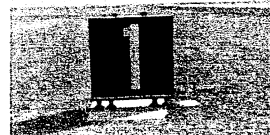
116A.JPG



116B.JPG



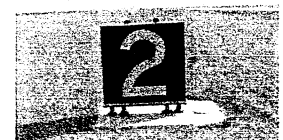
117A.JPG



117B.JPG



118A.JPG



118B.JPG

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119A.JPG



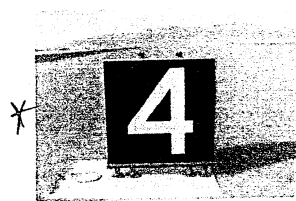
119B.JPG



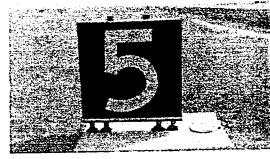
120A.JPG



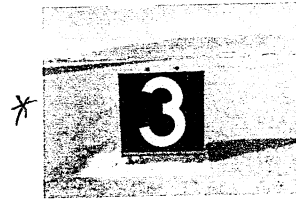
120B.JPG



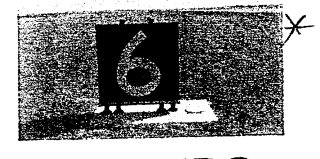
121A.JPG



121B.JPG



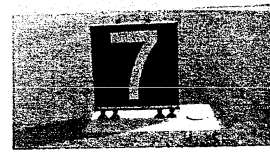
122A.JPG



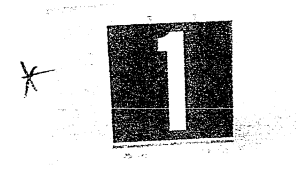
122B.JPG



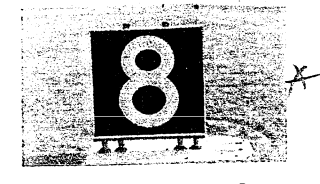
123A.JPG



123B.JPG



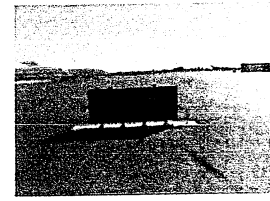
124A.JPG



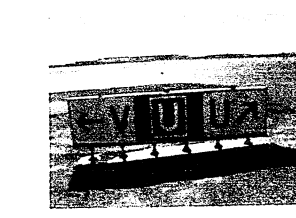
124B.JPG



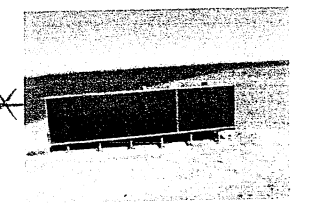
125A.JPG



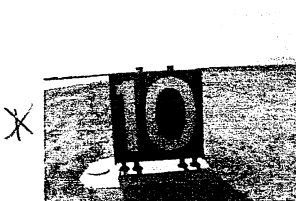
125B.JPG



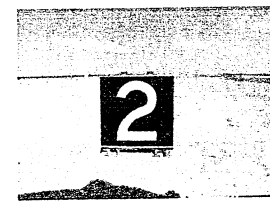
126A.JPG



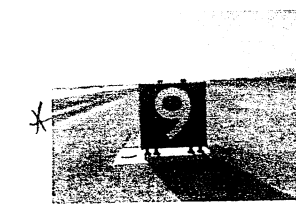
126B.JPG



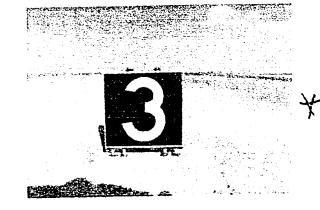
127A.JPG



127B.JPG

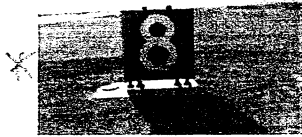


128A.JPG

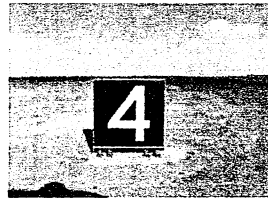


128B.JPG

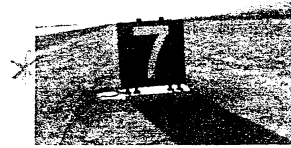
# AIRPORT SIGNS



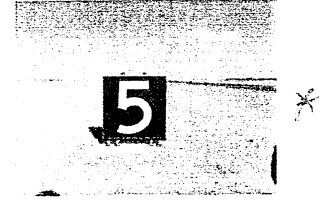
129A.JPG



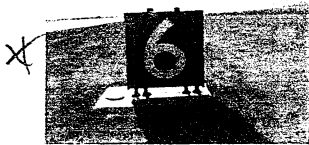
129B.JPG



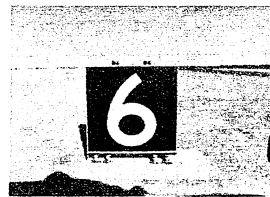
130A.JPG



130B.JPG



131A.JPG



131B.JPG



132A.JPG



132B.JPG



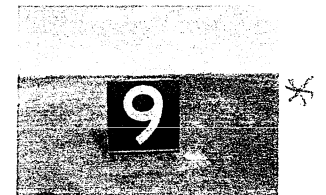
133A.JPG



133B.JPG



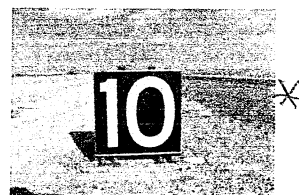
134A.JPG



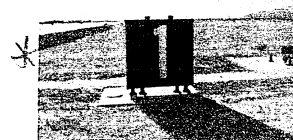
134B.JPG



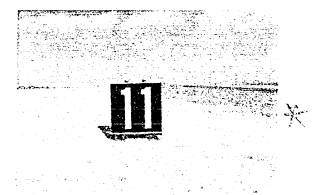
135A.JPG



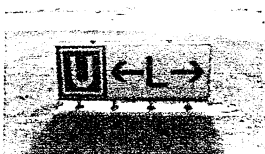
135B.JPG



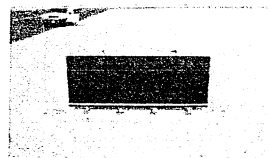
136A.JPG



136B.JPG



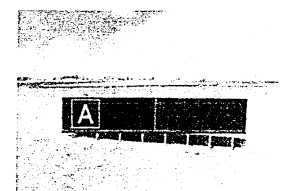
137A.JPG



137B.JPG

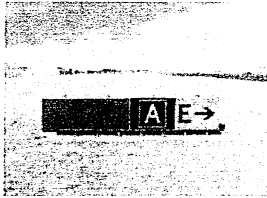


138A.JPG

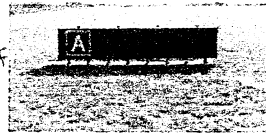


138B.JPG

# AIRPORT SIGNS



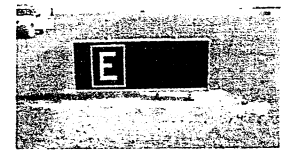
139A.JPG



139B.JPG



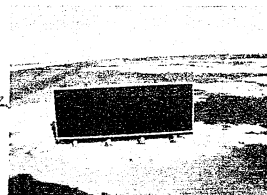
140A.JPG



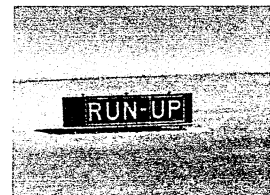
140B.JPG



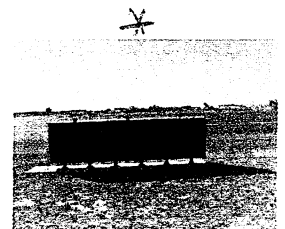
141A.JPG



141B.JPG



142A.JPG



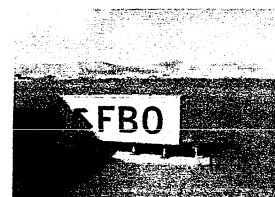
142B.JPG



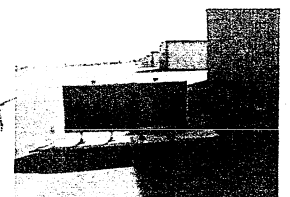
143A.JPG



143B.JPG



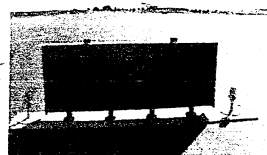
145A.JPG



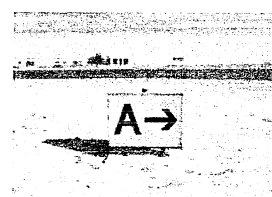
145B.JPG



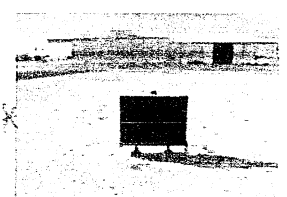
146A.JPG



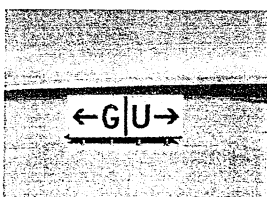
146B.JPG



147A.JPG



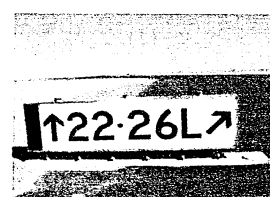
147B.JPG



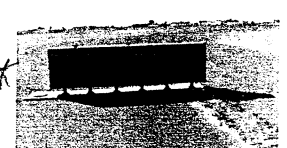
148A.JPG



148B.JPG



149A.JPG

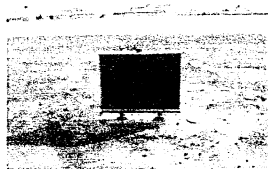


149B.JPG

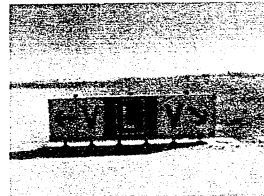
# AIRPORT SIGNS



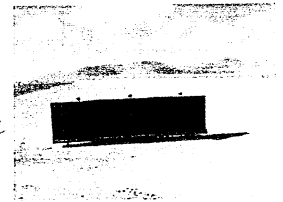
150A.JPG



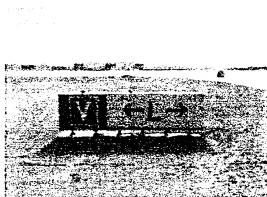
150B.JPG



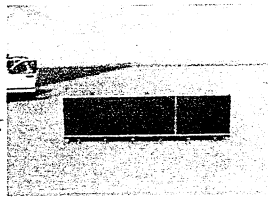
151A.JPG



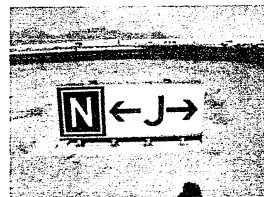
151B.JPG



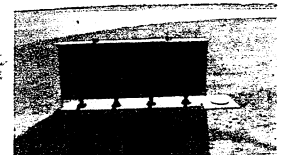
152A.JPG



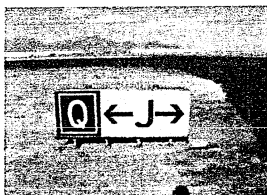
152B.JPG



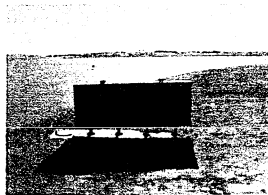
153A.JPG



153B.JPG



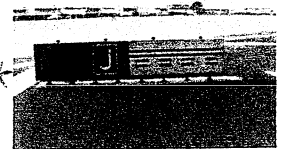
154A.JPG



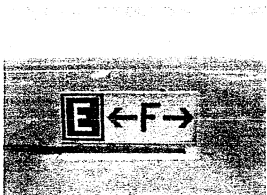
154B.JPG



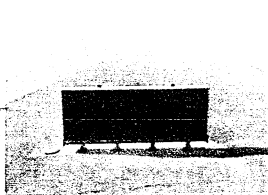
155A.JPG



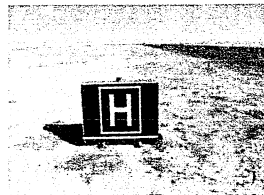
155B.JPG



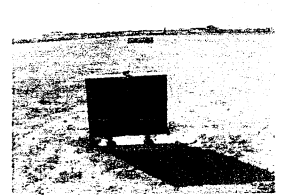
156A.JPG



156B.JPG



157A.JPG



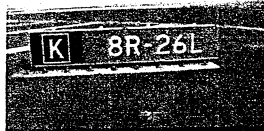
157B.JPG



158A.JPG



158B.JPG

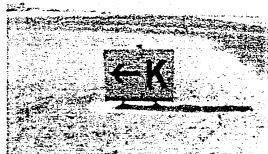


159A.JPG

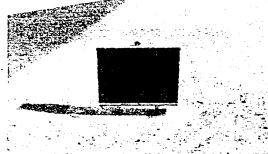


159B.JPG

# AIRPORT SIGNS



160A.JPG



160B.JPG



161A.JPG



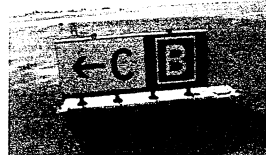
161B.JPG



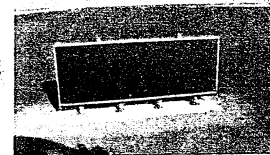
162A.JPG



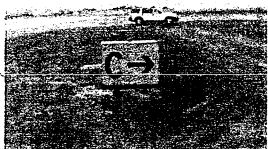
162B.JPG



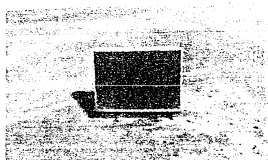
163A.JPG



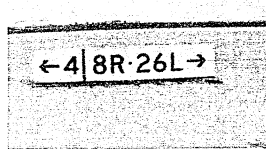
163B.JPG



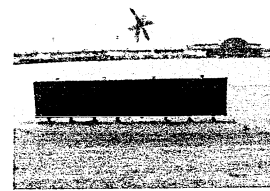
164A.JPG



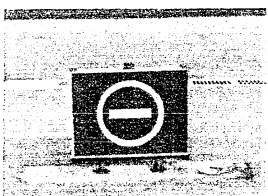
164B.JPG



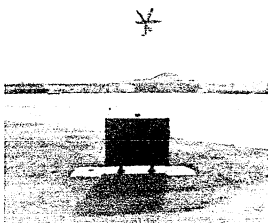
165A.JPG



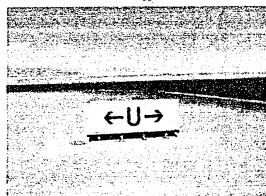
165B.JPG



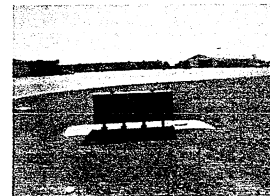
166A.JPG



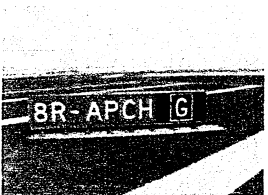
166B.JPG



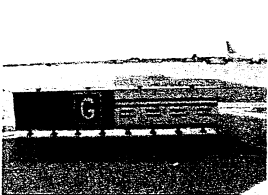
167A.JPG



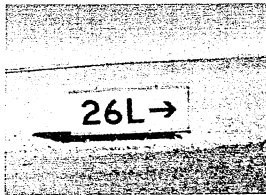
167B.JPG



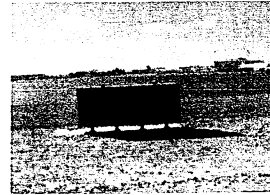
168A.JPG



168B.JPG

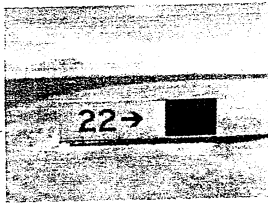


169A.JPG



169B.JPG

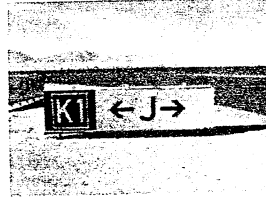
# AIRPORT SIGNS



170A.JPG



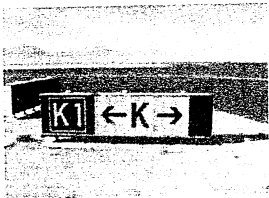
170B.JPG



171A.JPG



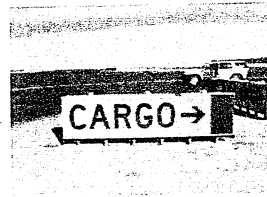
171B.JPG



172A.JPG



172B.JPG



173A.JPG



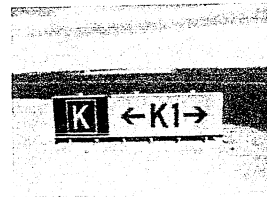
173B.JPG



174A.JPG



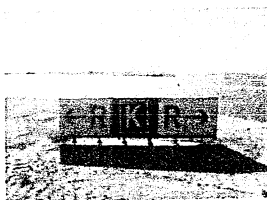
174B.JPG



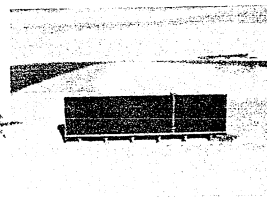
175A.JPG



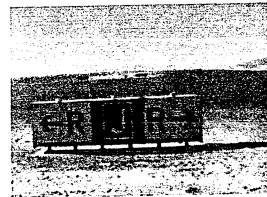
175B.JPG



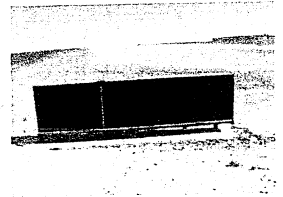
176A.JPG



176B.JPG



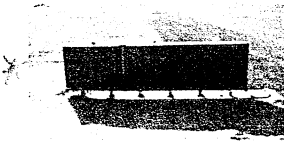
177A.JPG



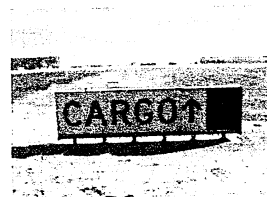
177B.JPG



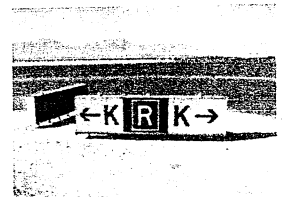
178A.JPG



178B.JPG



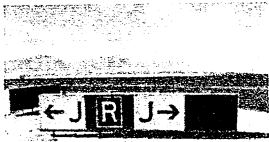
179A.JPG



179B.JPG



## AIRPORT SIGNS



180A.JPG



180B.JPG



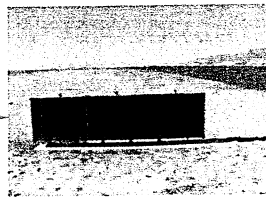
181A.JPG



181B.JPG



182A.JPG



182B.JPG



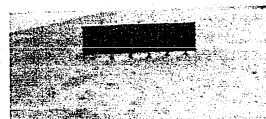
183A.JPG



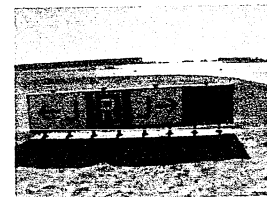
183B.JPG



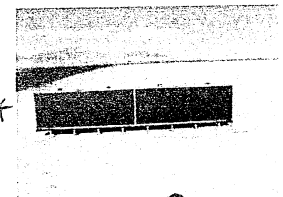
184A.JPG



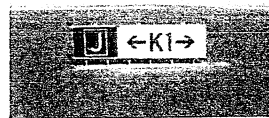
184B.JPG



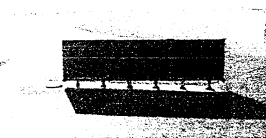
185A.JPG



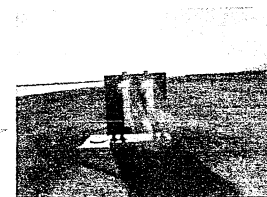
185B.JPG



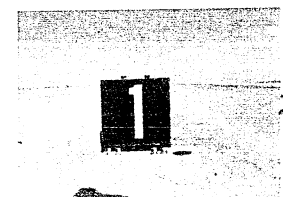
186A.JPG



186B.JPG



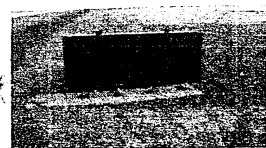
187A.JPG



187B.JPG



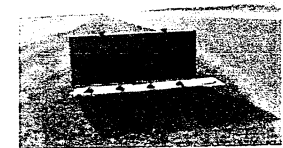
188A.JPG



188B.JPG



189A.JPG



189B.JPG



*Page 1 of 1*

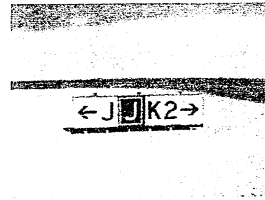
## AIRPORT SIGNS



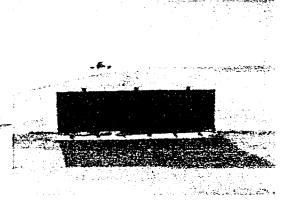
190A.JPG



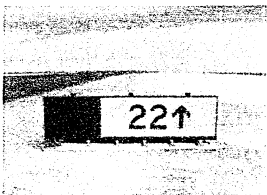
190B.JPG



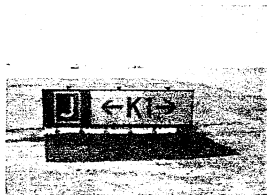
191A.JPG



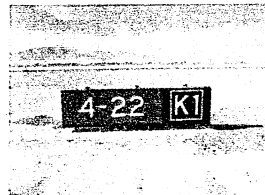
191B.JPG



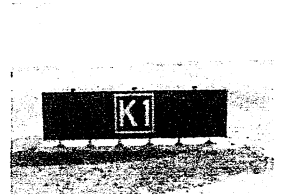
192A.JPG



192B.JPG



193A.JPG



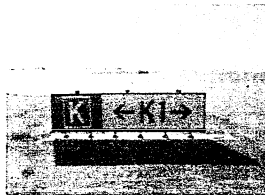
193B.JPG



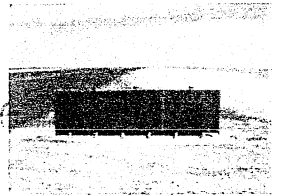
194A.JPG



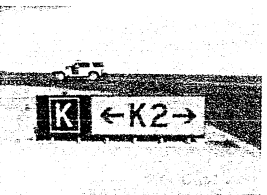
194B.JPG



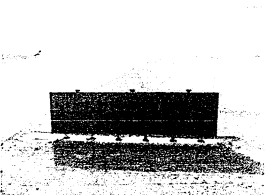
195A.JPG



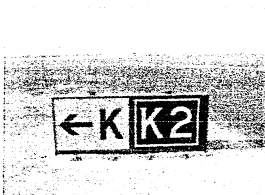
195B.JPG



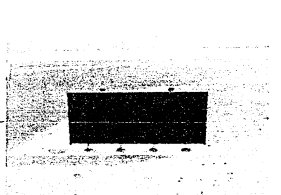
196A.JPG



196B.JPG



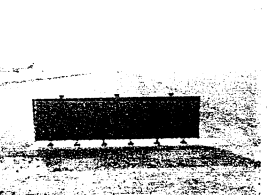
197A.JPG



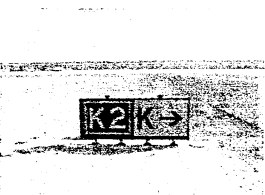
197B.JPG



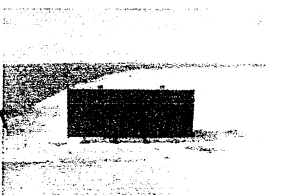
198A.JPG



198B.JPG

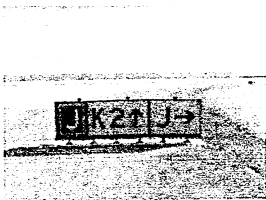


199A.JPG

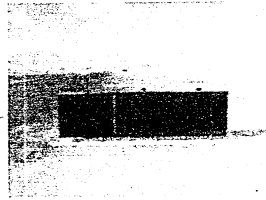


199B.JPG

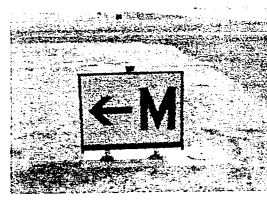
## AIRPORT SIGNS



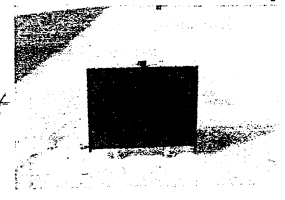
200A.JPG



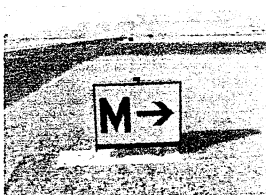
200B.JPG



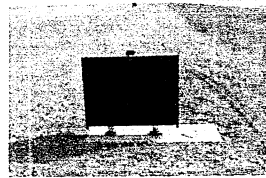
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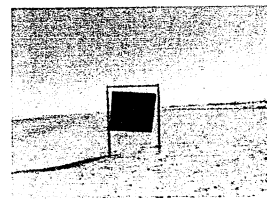
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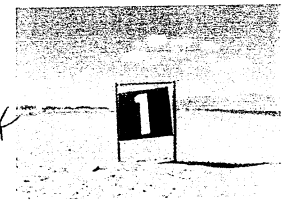
202A.JPG



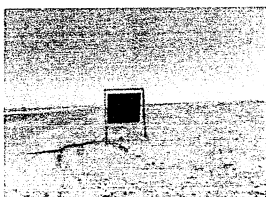
202B.JPG



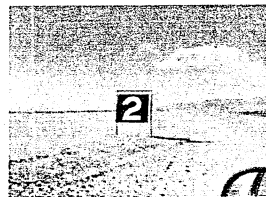
203A.JPG



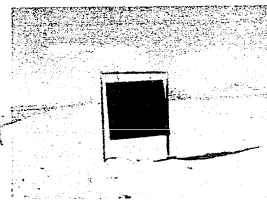
203B.JPG



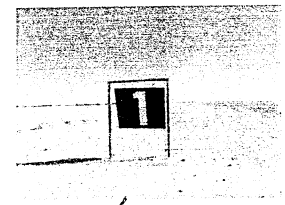
204A.JPG



204B.JPG

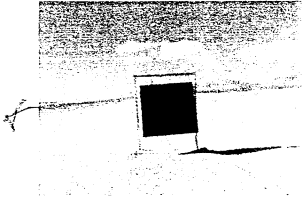


205A.JPG



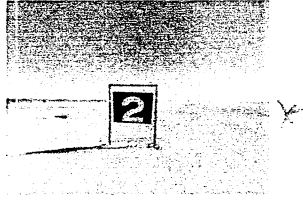
205B.JPG

## AIRPORT SIGNS



206A.JPG

5



206B.JPG

5

# AIRFIELD LIGHTING AND CONTROLS BID NO. 2004-204

## CHANGE ORDER NO. 01 UNIT PRICES

### Item 2 UNIT PRICE LIST

#### IN CONTRACT

LINE	SPEC. NO.	DESCRIPTION		QUANTITY	Unit	UNIT PRICE	TOTAL PRICE
3	L-105-5.1	New L-824, Type C 1/C #8, 5KV Cable (Temporary)		5,000	LF	\$1.50	\$7,500.00
4	L-105-5.2	Used L-824, Type C 1/C, 5KV #8 Cable (Temporary)		5,000	LF	\$0.50	\$2,500.00
5	L-105-5.3	Single-Way 2" Conduit, Temporary (Allowance)		2,000	LF	\$1.60	\$3,200.00
6	L-105-5.4	Temporary Guidance Sign		6	EA	\$1,735.00	\$10,410.00
7	L-105-5.5	Relocate Temporary Guidance Sign		6	EA	\$798.00	\$4,788.00
8	L-105-5.6	Temporary Guidance Sign - Reflective		6	EA	\$422.00	\$2,532.00
10	L-105-5.8	Temporary Taxiway Edge Lights		100	EA	\$222.00	\$22,200.00
11	L-105-5.9	Temporary Fixture/Reflector Removal		100	EA	\$22.00	\$2,200.00
22	L-110-5.9	Multi-Way Duct (14) 2" Conduit Directional Bore		800	LF	\$83.00	\$66,400.00
23	L-110-5.10	Multi-Way Duct (7) 2" Conduit Directional Bore		4,000	LF	\$62.25	\$249,000.00
24	L-110-5.11	Multi-Way Duct (4) 2" Conduit Directional Bore		200	LF	\$60.00	\$12,000.00
25	L-110-5.12	Multi-Way Duct (4) 4" Conduit Directional Bore		800	LF	\$82.00	\$65,600.00
							<b>\$448,330.00</b>

#### DELETE THE FOLLOWING PAY ITEMS

LINE	SPEC. NO.	DESCRIPTION		QUANTITY		UNIT PRICE	TOTAL PRICE
6	L-105-5.4	Temporary Guidance Sign		-6	EA	\$1,735.00	(\$10,410.00)
7	L-105-5.5	Relocate Temporary Guidance Sign		-6	EA	\$798.00	(\$4,788.00)
8	L-105-5.6	Temporary Guidance Sign - Reflective		-6	EA	\$422.00	(\$2,532.00)
10	L-105-5.8	Temporary Taxiway Edge Lights		-100	LF	\$222.00	(\$22,200.00)
11	L-105-5.9	Temporary Fixture/Reflector Removal		-100	LF	\$22.00	(\$2,200.00)
							<b>(\$42,130.00)</b>

#### REVISE THE FOLLOWING PAY ITEMS AS NOTED

LINE	SPEC. NO.	DESCRIPTION		QUANTITY		UNIT PRICE	TOTAL PRICE
4	L-105-5.2	Used L-824 #8 Temporary Cable	Add	55,000	LF	\$0.50	\$27,500.00
22	L-110-5.9	Multi-Way Duct (14) 2" Conduit Directional Bore	Delete	-380	LF	\$83.00	(\$31,540.00)
23	L-110-5.10	Multi-Way Duct (7) 2" Conduit Directional Bore	Delete	-1,389	LF	\$62.25	(\$86,465.25)
24	L-110-5.11	Multi-Way Duct (4) 2" Conduit Directional Bore	Delete	-65	LF	\$60.00	(\$3,900.00)
25	L-110-5.12	Multi-Way Duct (4) 4" Conduit Directional Bore	Add	20	LF	\$82.00	\$1,640.00
							<b>(\$92,765.25)</b>

#### ADD THE FOLLOWING NEW PAY ITEMS

LINE	SPEC. NO.	DESCRIPTION		QUANTITY	LF	UNIT PRICE	TOTAL PRICE
5a	L-105-5.3a	Used Single-Way 2" Conduit, Temporary (Allowance)		40,000	LF	\$0.85	\$34,000.00
22a	L-110-5.9a	Multi-Way Duct (14) 2" Conduit Direct Buried		320	LF	\$40.50	\$12,960.00
23a	L-110-5.10	Multi-Way Duct (7) 2" Conduit Direct Buried		1,450	LF	\$24.75	\$35,887.50
23b		Multi-Way Duct (7) 2" Conduit Direct Buried (credit)		1	LS	-\$2,879.80	(\$2,879.80)
							<b>\$79,967.70</b>

Deleted	(\$42,130.00)
Revised	(\$92,765.25)
New	\$79,967.70
<b>Change Order Total</b>	<b>(\$54,927.55)</b>

Project Name : Airfield Lighting and Controls  
 Contractor : EAS Contracting, LP  
 Bid No : 2004-204

**CHANGE ORDER REQUEST NO. 01**

**CHANGE ORDER REQUEST NO. 01**  
**Line Item 2**

**DESCRIPTION OF CHANGE:** Provide new unit price and eliminate unit prices to pay for the work needed to maintain temporary power and establish a method of payment for conduit duct from Bore ends to Handholes on Multi-Way Duct (14) 2" and Multi-Way Duct (7) 2". This will be provided by adding three (3) new pay items to compensate for the work to be completed. These are shown on the list attached to the change order. Decrease in contract value of \$56,467.50 and no change in contract time.

**PROBLEM:** The contractor is required to replace the wiring for all the airfield lighting. This work is accomplished piecemeal to maintain airport traffic. Piecemealing the installation of wire requires the use of circuit bypasses to maintain continuity while the work is ongoing. The contract includes various line items for paying for the temporary bypasses, which include estimated quantities by the engineer as follows:

LINE	DESCRIPTION	Qty.	Unit	UNIT PRICE	TOTAL PRICE
3	New L-824, Type C 1/C #8, 5KV Cable (Temporary)	5,000	LF	\$1.50	\$7,500.00
4	Used L-824, Type C 1/C, 5KV #8 Cable (Temporary)	5,000	LF	\$0.50	\$2,500.00
5	Single-Way 2" Conduit, Temporary (Allowance)	2,000	LF	\$1.60	\$3,200.00
6	Temporary Guidance Sign	6	EA	\$1,735.00	\$10,410.00
7	Relocate Temporary Guidance Sign	6	EA	\$798.00	\$4,788.00
8	Temporary Guidance Sign – Reflective	6	EA	\$422.00	\$2,532.00
10	Temporary Taxiway Edge Lights	100	EA	\$222.00	\$22,200.00
11	Temporary Fixture/Reflector Removal	100	EA	\$22.00	\$2,200.00
				Total	<b>\$55,330.00</b>

These quantities were based on general assumptions that the contractor could work large areas and make short, easy bypasses. The work as progressing, is done in small areas requiring more bypasses than anticipated, in addition, the 2" conduit can be re-used but no unit price is provided. It is anticipated that based on the current trend for bypasses the quantities required will change as follows:

LINE	DESCRIPTION	Qty			UNIT PRICE	TOTAL PRICE
4	Used L-824 #8 Temporary Cable	55,000	Add	LF	\$0.50	\$27,500.00
5a	Used Single-Way 2" Conduit, Temporary (Allowance)	40,000.00	New	LF	\$ .85	\$34,000.00
						<b>\$61,500.00</b>



Project Name : Airfield Lighting and Controls  
 Contractor : EAS Contracting, LP  
 Bid No : 2004-204

## CHANGE ORDER REQUEST NO. 01

In reviewing the means and methods the contractor is using for temporary measures, it was also determined that the following line items will not be used and should be eliminated.

LINE	DESCRIPTION	Qty			UNIT PRICE	TOTAL PRICE
6	Temporary Guidance Sign	-6	Delete	EA	\$1,735.00	(\$10,410.00)
7	Relocate Temporary Guidance Sign	-6	Delete	EA	\$798.00	(\$4,788.00)
8	Temporary Guidance Sign - Reflective	-6	Delete	EA	\$422.00	(\$2,532.00)
10	Temporary Taxiway Edge Lights	-100	Delete	LF	\$222.00	(\$22,200.00)
11	Temporary Fixture/Reflector Removal	-100	Delete	LF	\$22.00	(\$2,200.00)
						(\$42,130.00)

The changes above result in a contract increase of \$19,370.00 (\$61,500.00 -\$42,130.00).

The second change pertains to a discrepancy between the quantities on the bid items and the requirements in the specifications. The engineer calculated the length of the bores underneath the taxiways and the runways based on making the bore pit at the location of the handholes which are located approximately 50 to 75 feet from the edge of pavement. This resulted in the following pay items:

LINE	DESCRIPTION	Qty			UNIT PRICE	TOTAL PRICE
22	Multi-Way Duct (14) 2" Conduit Directional Bore	800		LF	\$83.00	\$66,400.00
23	Multi-Way Duct (7) 2" Conduit Directional Bore	4,000		LF	\$62.25	\$249,000.00
24	Multi-Way Duct (4) 2" Conduit Directional Bore	200		LF	\$60.00	\$12,000.00
25	Multi-Way Duct (4) 4" Conduit Directional Bore	800		LF	\$82.00	\$65,600.00
						<b>\$393,000.00</b>

The specification says the bore will be paid to 5 feet outside the shoulder or pavement area resulting in the quantities above being over stated. In addition the distance between the bore termination, 5 feet outside pavement and the handhole have more duct bank configuration not included in the bid documents, i.e. (14) 2" Conduit Duct Bank and a (7) 2" Conduit Duct Bank.

This change order will revise the quantities of directional bore to a new realistic number and add unit prices to pay for the duct banks described below. The last Unit Price, 23b, provides for material credit for the materials not installed for the bore at Taxiway K2. All other work associated with this bore were paid at the unit price.

LINE	DESCRIPTION	Qty			UNIT PRICE	TOTAL PRICE
22	Multi-Way Duct (14) 2" Conduit Directional Bore	420	Final	LF	\$83.00	\$34,860.00
23	Multi-Way Duct (7) 2" Conduit Directional Bore	2,611	Final	LF	\$62.25	\$162,534.75
24	Multi-Way Duct (4) 2" Conduit Directional Bore	135	Final	LF	\$60.00	\$8,100.00
25	Multi-Way Duct (4) 4" Conduit Directional Bore	820	Final	LF	\$82.00	\$67,240.00
22a	Multi-Way Duct (14) 2" Conduit	320	Add	LF	\$40.50	\$12,960.00
23a	Multi-Way Duct (7) 2" Conduit	1,450	Add	LF	\$24.75	\$35,887.50
23b	Material Credit for Casing and Conduit	1	Add	LS	-\$2,879.80	(\$2,879.80)
						<b>\$318,702.45</b>

**Project Name :** Airfield Lighting and Controls  
**Contractor :** EAS Contracting, LP  
**Bid No :** 2004-204

**CHANGE ORDER REQUEST NO. 01**

The change above results in a contract decrease of \$74,297.55 (\$393,000.00 - \$318,702.45).

The two changes listed results in a credit of \$54,927.55 (\$19,370.00 - \$74,297.55).

**SOLUTION:** Three (3) pay items have been added to compensate the contractor for the work needed to maintain temporary power and connections from Conduit Duct from Bore ends to Handholes. Five Pay Items were eliminated and five others were adjusted to more realistic quantities.

**SAVINGS OF:** \$ 54,927.55

**CHANGE ORDER TYPE:** Unforeseen Conditions

City of El Paso

El Paso International Airport, Airfield Lighting & Controls  
El Paso Bid No. 2004-204

### REQUEST FOR INFORMATION/CLARIFICATION

To: Dinter Engineering Company  
385 Gentry Way, #200  
Reno, Nevada 89502  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: 01/14/05

RFI 1048 / 13

Request to Designer (Please print question legibly; use back if more space is needed)

\_\_\_\_\_  
Per on-site field conditions, we are lacking Pay Items for extending Conduit Duct from bore ends to  
Handholes on Multi-way Duct, (14) 2" and Multi-way Duct, (7) 2".

EAS proposes the addition of Item No. L-110-5.9A ( Multi-way Duct (14) 2" Conduit, Direct Buried) for  
320 LF. At \$40.50 LF. ( Item L-110-5.4 less (4) conduit) and the addition of Item No. L-110-5-10A  
( Multi-way Duct (7) 2" Conduit, Direct Buried) for 1450 LF. At \$24.75 LF. ( Item No. L-110-5.5  
less (1) conduit). Item No. L-110-5.2 ( Multi-way (4) 4" Conduit, Direct Buried will need to be increased  
by 925 LF. At \$23.50 LF. For re-route and bore connections South of Taxiway U. Item No. L-110-5.7  
( Multi-way (4) 2" Conduit, Direct Buried) will need to be increased by 225 LF. At \$ 17.00 LF. For Bore J  
tie-in and modification of K2 Bore. ( All quantity additions are researched estimates by EAS )

This \$74,410.00 of additions can be off-set by deducting 1196 LF. From Item No. L-110-5.10 ( Multi-way  
Duct, (7) 2" Conduit, Directional Bore verified not to be needed.) ( \$74,451.00 ).

This request relates to  
Drawing/ Detail No.: \_\_\_\_\_  
Specation No.: Item No. L-110-5.9, 5.10,5.11, & 5.12

Date Info Required  
to prevent delays: ASAP

Attachments to this request: None

Bobby McClelland  
(Contractor's Name)

EAS Contracting, LP  
( Company Name)

Designer's Response \_\_\_\_\_

Date of Response 1/20/2005

The proposed solution is acceptable.  
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City of El Paso

El Paso International Airport, Airfield Lighting & Controls  
El Paso Bid No. 2004-204

### REQUEST FOR INFORMATION/CLARIFICATION

To: Dinter Engineering Company  
385 Gentry Way, #200  
Reno, Nevada 89502  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: 01/14/05

RFI 1048 / 11

Request to Designer (Please print question legibly; use back if more space is needed)

Per on-site conditions, and our discussions on 1/5/05, our current means & method of maintaining  
temporary power will require the multiple re-use of Item No. L-105-5.3, Single-way 2" Conduit, Temporary.

This Item has an allowance of 2,000 LF. At \$1.60 LF.

Per discussion, re-use of the conduit, as in re-use of the #8 cable, is anticipated to be several  
thousand feet. Item No. L-105-5.2, Used #8 Cable, is estimated at 60,000 LF.. Re-use of 2" Conduit  
is estimated at 40,000 LF..

EAS would appreciate the addition of an Item for Used Single-way 2" Conduit, Temporary.

Item No. L-105.5.3A for 40,000 LF. at a price of \$0.85 LF. ( Item No. L105-5.3 less new conduit )

As discussed, EAS does not expect a need for Temporary Items L-105-5.4, L-105-5.5, L-105-5.6,  
L-105-5.7, L-105-5.8, or L-105-5.9. Funding for the increase of L-105-5.2 and addition of L-105-5.3A,  
in an amount of \$61,500.00, can be off-set with a credit for the referenced temporary Items not required,  
(\$44,770.00) and a known reduction of Item No. L-867-4.1 by 31 EA.. (\$17,143.00)

This request relates to

Drawing/ Detail No.:

Specion No.:

Item No. L-105-5.3 & L-105-5.2

Date Info Required

to prevent delays:

ASAP

Attachments to this request:

None

Bobby McClelland

(Contractor's Name)

EAS Contracting, LP

( Company Name)

Designer's Response

Date of Response

1/20/2005

The proposed solution is acceptable.  
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